ECORFAN Journal-Bolivia June 2024 Vol.11 No.20 17-27
Article

Spanish language trend on Twitter: an analysis of modern writing

Tendencia del lenguaje español en Twitter: un análisis de escritura moderna

Lara Torres, Claudia Guadalupe* [a], Velázquez Macias, Jesús [b] and Rodríguez González, Beatriz Adriana [c]

[a] Universidad Politécnica de Zacatecas • KIB-8474-2024 • 0000-0002-3066-2967 • 905451
[b] Universidad Politécnica de Zacatecas • I-6696-2018 • 0000-0003-0180-023X • 431443
[c] Universidad Autónoma de Zacatecas • KIC-3996-2024 • 0000-0001-7133-2596 • 99443

CONAHCYT classification:

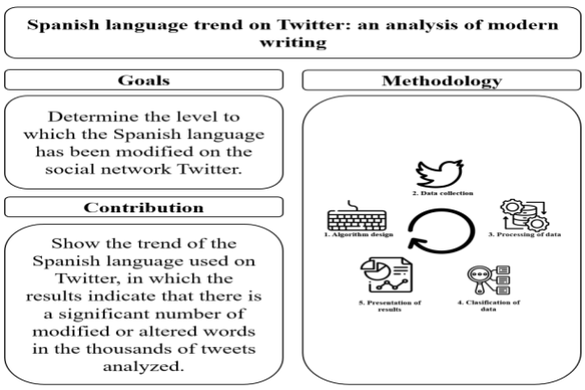
Area: Social Sciences
Field: Education sciences
Discipline: Education
Subdiscipline: Language Sciences

https://doi.org/10.35429/EJB.2024.20.11.17.27
History of the article:
Received: February 02, 2024
Accepted: June 30, 2024

* ✉ [jvelazquez@upz.edu.mx]

Abstract

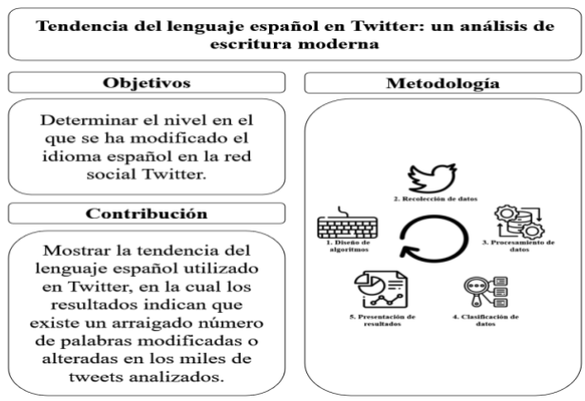
Forms of digital communication have positioned themselves as the preferred method for people to interact regardless of age, situation or condition, which is why the need arises for rapid communication on social networks using abbreviations, letter changes or the use of codes. of writing. The objective of the research is to determine the level at which the Spanish language has been modified on Twitter, using an exploratory and descriptive analysis with data science. The results obtained indicate that there are quite a few modified words, the word "guey" standing out. These tweets are mostly sent en masse during the night; and its use intensified during the Covid-19 pandemic. It is worth mentioning that the evolution of this type of language arises from the need for increasingly efficient communication that new generations demand.



Language, Twitter, Data science

Resumen

Las formas de comunicación digital se han posicionado como el método preferido de las personas para interactuar independientemente de la edad, situación o condición, por ello surge la necesidad de una comunicación rápida en las redes sociales utilizando abreviaciones, cambios de letras o el uso de códigos de escritura. El objetivo de la investigación es determinar el nivel que se ha modificado el idioma español en Twitter, utilizando un análisis exploratorio y descriptivo con la ciencia de datos. Los resultados obtenidos, indican que existen bastantes palabras modificadas, sobresaliendo la palabra "guey", estos tweets en su mayoría se envían de forma masiva durante la noche; y su uso se intensificó durante la pandemia por Covid-19. Cabe mencionar que la evolución de este tipo de lenguaje surge de la necesidad de comunicación cada vez más eficiente que exigen las nuevas generaciones.



Lenguaje, Twitter, Ciencia de datos

Citation: Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.

Introduction

Historically, human beings have had the need to communicate, which has allowed them to evolve and grow to discover new methods that allow this activity, thus achieving increasingly complex interactions with their peers. Social communication was one of the main objectives to be developed by technology, in order to search for scenarios and tools that would allow communication with the minimum of problems (Pulido et al., 2021). That is why, nowadays, technology and globalization have transformed the way we communicate and interact with our environment, and within this context, social networks on the Internet have become increasingly relevant because there is also an excessive and widespread use of mobile devices.

Therefore, the present research analyzes one of the main effects that the writing of the Spanish language has on the different interactions in social networks. For this reason, the present study seeks to know the influence that social networks, mainly Twitter, have on the language of users. To achieve the above, a survey was conducted among high school students to identify the main words used in social networks and that due to their use or way of writing (spelling mistakes or discretionary abbreviations) are considered to distort the Spanish language, since the Real Academia Española does not recognize such words as correctly written or simply does not (yet) include them as commonly used in Spanish so they do not appear in the Dictionary of the Spanish Language.

The main objective of the study in question is to highlight the characteristics and properties of these words in the social network Twitter, as well as their incidence and frequency of use over the years, as noted above, these words were previously selected through a structured survey applied to students of different semesters of the Bachelor's Degree in Business Administration and Management, Computer Systems Engineering and Automotive Engineering of the Polytechnic University of Zacatecas.

With the survey, information was obtained from the years 2019 to 2022, and the words that resulted with the most frequency of use by respondents were: “holi”, “muxo”, “nop”, “ontas”, “pork”, “sip”, “tagueno” and “wey”.

Using methods, techniques and computer programs, the content of the tweets in Spanish was explored in order to find coincidences of these eight terms in the tweets published in the months of July 2019 to 2022, so that their level of use in this social network could be studied throughout these four years. In addition to the frequency of use, it was also possible to determine some of the characteristics of the tweets with identified matches such as the date and time of publication, the operating system used by the user and other data of lesser relevance for this study such as the number of replies, number of “likes”, location, user name, etc.

In addition to the above, this research aims to expose the communication processes of Twitter users, showing the use of misspelled or abbreviated words in messages and the problem that this represents for the established linguistic norms. Due to the fact that, on many occasions, users of social networks do not care about spelling or writing, but are also influenced by the idioms that circulate in social networks and that motivate abbreviations, codes or misspelled words, and still manage to engage in communication. Therefore, it is important to analyze the changes in language generated by Twitter users, regardless of gender, age and location, in order to establish strategies to improve the language that, although not formal, should be instilled a correct use of words.

Writing in social networks

Nowadays, social networks are considered as an element to which people give too much importance, that is, they are becoming part of their daily lives. Users are connected to social networks a great deal of time, sometimes regardless of the time, condition or situation in which they are. Consequently, nowadays we live with an immediacy of communication and one of the main means to carry it out are the different popular social networks, because they are a way to socialize and establish contacts, as well as to keep informed.

Social networks have become new forms of expression and communication among young people regardless of how they contribute to or affect the daily life of each individual (Pazmiño Benavides, 2012).

ISSN: 2410-4191.
RENIECYT-CONAHCYT: 1702902

Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.
https://doi.org/10.35429/EJB.2024.20.11.17.27

This dynamism has led to some alterations related to the way people write Spanish, since 2008, Fernandez stated that in recent years it has been seen that spelling mistakes have increased and the Internet has had to do in this situation because, in it, forms are neglected and consequently writing is deformed, because, being an informal and uncontrolled medium, users do not pay too much attention to this aspect. This leads to the instantaneousness of communication, and it is usually assumed that it is normal to make mistakes in writing, and even the abbreviation of some words that prevent them from being written correctly. Thus, in terms of content, we can affirm that new technologies are changing the way we communicate, consume, think, work and access information (Avila Burgos et al., 2016).

However, it seems that what is important is the meaning of the message without considering the way it is written, if there is any spelling mistake or if abbreviated words are used, which are not official. Indeed, as Torres (2017) indicates, the first changes in the way a message is transmitted in writing came with the need to shorten the number of characters used in text messages with the expansion of the use of cell phones in the 1990s. However, at present, regardless of the number of characters used to send a message or establish a communication through a social network, changes in writing continue to have an exponential increase, knowing that many times there are no limits as to the length of must contain some message, it is opted for its abbreviation (Torres, 2017).

As is well known, the Internet is a medium in which, as a general rule, the most basic tool of communication, language, is systematically neglected (Fernandez, 2008). Therefore, written verbal communication is the medium par excellence in the network, leaving out phone calls between cell phones and local phones, since written verbal communication is considered as a colloquial and oral style, due to the fact that one speaks as one writes, regardless of grammar, spelling and syntax (Peñalver, 2019). Therefore, spelling mistakes in social networks are usually attributed to the lack of concentration or laziness of the user before the communicative proximity, since they know that the person who is going to read it knows the conventions of use of social networks (Mancera Rueda and Pano Alamán, 2014).

However, the freedom of writing and easy access to the Internet, promotes the lack of interest in good spelling, and users with unorthodox writing habits are commonly found (Torres, 2017).

On the other hand, it is important to consider that Spanish is the third most used language on the Internet (behind English and Chinese) and the second most used language on Twitter and Facebook, considered the two main social networks in the world (Peñalver, 2019). However, the growth of Facebook users in Spanish, is very high compared to English, likewise, Spanish is the second most used language on Twitter, in English-speaking cities such as London or New York, to mention a few (Mocanu et al., 2013).

Based on these data that demonstrate the weight of Spanish in communication on the Internet today, the present study aims to know the main words that are orthographically misspelled or abbreviated in the social network Twitter, as well as to determine to what extent the Spanish language and its spelling have been modified.

To obtain the above, data science is a tool that has become fundamental in the exploitation of data, among its main objectives are the creation of models to describe standards of behavior, in order to facilitate decision-making or make predictions of some specific phenomenon (García et al., 2018), it is also considered as something novel for information retrieval and analysis in different disciplines (Lemus-Delgado and Pérez Navarro, 2020). In addition to the above, it is a discipline that in recent years has had a great growth, due to its implementation in scenarios where large volumes of data have been generated, and which arises as a result of the insufficiency of classical methods and analysis to process large volumes of data, it is also established as multidisciplinary since it involves statistics, mathematics and data engineering among other fields (Britos, 2020).

Therefore, once the literature has been analyzed, the main research question is determined: At what level has the Spanish language been modified in the social network Twitter?

ISSN: 2410-4191.
RENIECYT-CONAHCYT: 1702902

Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.
https://doi.org/10.35429/EJB.2024.20.11.17.27

Going further into the research and in order to answer the research question and the research objective, the following secondary questions were established:

What are the main characteristics of the words that are modified on the social network Twitter?

What are the words modified and most used on Twitter?

What is the trend in the use of these words?

What is the main operating system from which the tweet is issued?

On the other hand, the present work aims to determine at what level the Spanish language has been modified in the social network Twitter, covering the writing trends in the tweets made, as well as highlighting the characteristics and properties of those words in the social network and their incidence and frequency of use over the years.

Finally, it is worth mentioning that currently the social network called Twitter changed its name to X, however, the general functions continue to function normally, the only thing that seems to have changed regardless of its administrative issues, is the logo and the name of the network. Therefore, in this study, the name Twitter is still used, since at the time of obtaining the information for this research, the network was still in force.

Methodology

For the present study, the descriptive approach was used, which made it possible to specify the properties and characteristics of the phenomenon studied as it is presented in reality, so that its main objective is to obtain a detailed and precise understanding of a specific phenomenon. It is also quantitative in nature, adapted to the specific needs of the study in question. A quantitative methodology is based on the collection and analysis of numerical data to answer research questions and/or test hypotheses. This approach is based on the collection of information that can be measured and analyzed statistically, allowing objective and generalizable results to be obtained (Hernández-Sampieri et al., 2018).

Participants

An experimental design was used to conduct the study, in addition, to carry out the data collection a survey was applied to 385 students of the Polytechnic University of Zacatecas of the academic programs of the Bachelor's Degree in Administration, Computer Systems Engineering and Automotive Engineering, which are on average between 18 and 23 years old, in order to collect the words they use in the social network Twitter and that meet the criteria of alteration or abbreviation mentioned in previous paragraphs, the survey is available in the next section of this document. The words with the highest number of appearances were used to extract the tweets and the results obtained are analyzed, according to the opinion of the students surveyed the most used words are: “holi”, “muxo”, “nop”, “ontas”, “pork”, “sip”, “tagueno” and finally “wey”.

Strategies and instruments

To determine which are the words most used by young people on the social network Twitter, the following instrument was used, consisting of 3 questions, once the most used words were determined, data extraction began.

1. Of the following words, which are the ones you use the MOST to communicate in your social networks (you can select several):

01 muxo; 02 holi; 03 oki; 04 xk; 05 xro; 06 mui; 07 xd; 08 pq; 09 pk; 10 uwu; 11 tqm; 12 tkm; 13 crack; 14 todxs; 15 sip; 16 sipi; 17 nop; 18 nopi; 19 tlj; 20 xfa; 21 wey; 22 jaja; 23 jeje; 24 gpi; 25 bn; 26 pork; 27 lol; 28 gueno; 29 ontas; 30 xd.

2. Of the following words which ones do you use the LEAST to communicate in your social networks (you can select several):

01 muxo; 02 holi; 03 oki; 04 xk; 05 xro; 06 mui; 07 xd; 08 pq; 09 pk; 10 uwu; 11 tqm; 12 tkm; 13 crack; 14 todxs; 15 sip; 16 sipi; 17 nop; 18 nopi; 19 tlj; 20 xfa; 21 wey; 22 jaja; 23 jeje; 24 gpi; 25 bn; 26 pork; 27 lol; 28 gueno; 29 ontas; 30 xd.

3. If you use other words that are not in the above lists, write them here.

ISSN: 2410-4191.
RENIECYT-CONAHCYT: 1702902

Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.
https://doi.org/10.35429/EJB.2024.20.11.17.27

Procedure

Because studies on communication and sentiment analysis in social networks are becoming more frequent and determinant for a myriad of purposes, especially marketing, tools developed in Python were used, implementing libraries designed for the extraction of data published within the social network Twitter (Abdulsalam et al., 2024). The searches were designed based on various filters, using some of the words in question as the main parameter and restricting the search to tweets written in Spanish.

Other parameters limit and shorten the searches by means of their publication date, specifically obtaining the date and time of publication; the results of this search are stored in comma-separated files (CSV) for subsequent main analysis. The algorithm used has the capacity to extract and store approximately 100,000 tweets per hour as long as they meet the search criteria and have a stable internet speed, as well as a computer with at least 8 GB of RAM available.

This large amount of information is analyzed by means of data science using some advanced statistical functions and some algorithms that allow its classification, for these tasks the Python programming software and the implementation of some external libraries such as Pandas allow to represent and sort such information.

The Snscrape library is a tool for searching and extracting information in social networks (Abednego et al., 2022). The library is able to filter tweets by setting various conditions; such as date, keywords, language or number of "likes" received, (Sarkar and Rajadhyaksha, 2021). The choice of the social network Twitter in this study is based basically on the ease with which it presents to extract information, functionality that is not available in other social networks, this allows retrieving information without limitations on the number of queries or number of records retrieved (Williams et al., 2013). Twitter is therefore, an immense generator of information, because it produces large amounts of data that can be subsequently analyzed with advanced statistical methods, numerous studies of general topics, which apply data mining have focused on this social platform (Zarrabeitia-Bilbao et al., 2022).

The retrieval of tweets was performed during the month of July (considering that it is a holiday period, and even times of pandemic) in the years 2019, 2020, 2021 and 2022 using various words colloquially used to communicate on Twitter and that are not recognized by the Real Academia Española. In addition, a comparison of the word "holi" in the months of July and December 2019 and 2020 was carried out to analyze the evolution of its forms of use in that period.

Data analysis

In order to process the information, each month of July of the years mentioned above was analyzed, considering the following variables: number of tweets made, date and time of the tweet and the device from which it was published. Table 1 shows a comparison of the number of tweets made in the month of July for each of the aforementioned years:

Box 1

Table 1

Comparative analysis of the number of tweets with selected word usage in the month of July by year.

Word	2019	2020	2021	2022
Holi	33,817	99,999	97,198	59,655
Muxo	7,430	8,369	9,146	11,833
Pork	5,156	10,576	9,074	9,654
Tagueno	634	982	747	775
Nop	4,494	62,526	63,881	46,998
Ontas	4,494	2,043	3,182	1,135
Sip	34,162	72,893	82,844	57,067
Wey	329,048	579,019	522,858	499,262

Source: Own elaboration based on the analysis of the extracted data.

As can be seen in Table 1, the word "wey" is the most used word in the social network Twitter, showing a notable increase from 2019 to 2020. Likewise, it is shown that the use of the word "sip", in the same years mentioned above, had a strong increase in its use, the same case happens with the word "holi", so in comparison with the other words there is a significant difference. It is worth mentioning that the increase in the use of the words described above was observed more frequently in times of pandemic due to Covid-19, probably attributable to the time people stayed at home. Therefore, the most used words on Twitter, even with the passage of time were: "wey", "sip" and "holi" respectively (there is a tendency to grow in 2020 and 2021 due to the pandemic and then the use of almost all of them is reduced).

ISSN: 2410-4191.
RENIECYT-CONAHCYT: 1702902

Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.
https://doi.org/10.35429/EJB.2024.20.11.17.27

On the other hand, the word with the least amount of reported coincidences is “tagueno” by obtaining in each of the years analyzed less than 1000 tweets, this because users generally tend to use the word “ok” better to say that something is right or that they agree with the idea embodied in the message by the issuer. It can be deduced that users prefer to use the term “ok”, because it is a short word, used very frequently in social networks, and finally because it means the same as the word “tagueno”, it could be said that they are synonyms in the context of abbreviated and simplified writing.

On the other hand, once analyzed the results obtained, it is found that the operating systems mostly used to post tweets are firstly Google's Android, secondly Apple's IOS, thirdly, if you use a personal computer browser, tables 2, 3 and 4 show the results of the operating system variable and its behavior over the years in the month of July by word.

Box 2

Table 2

Operating system from which the tweet is issued with word analyzed by year (Android).

Word	2019	2020	2021	2022
Holi	17,950	62,656	59,739	35,874
Muxo	3,822	4,738	5,267	6,478
Pork	2,909	6,431	5,378	4,925
Tagueno	355	564	435	457
Nop	2,154	37,733	39,531	28,383
Ontas	2,157	1,036	1,953	585
Sip	18,022	43,324	50,326	33,628
Wey	144,475	256,896	234,387	218,262

Source: Own elaboration based on the analysis of the extracted data

Box 3

Table 3

Operating system from which the tweet is issued with word analyzed by year (IOS).

Word	2019	2020	2021	2022
Holi	8,932	24,788	23,958	16,084
Muxo	2,521	2584	2,729	4,154
Pork	1,392	2,789	2,509	3,440
Tagueno	182	268	187	183
Nop	1,733	14,992	14,128	11,603
Ontas	1,730	786	911	458
Sip	8,455	16,969	18,575	13,985
Wey	154,535	273,658	245,143	244,324

Source: Own elaboration based on the analysis of the extracted data

Box 4

Table 4

Operating system from which the tweet is issued with word parsed by year (Web app).

Word	2019	2020	2021	2022
Holi	4,636	11,053	11,504	6,589
Muxo	822	988	1,074	1,128
Pork	455	1,028	955	1,124
Tagueno	82	130	114	128
Nop	325	8,722	9,597	6,455
Ontas	325	208	299	87
Sip	5,480	11,139	12,846	8,352
Wey	21,974	43,114	39,534	33,370

Source: Own elaboration based on the analysis of the extracted data

According to the analysis of the records obtained for all the words, the operating system most used to publish tweets is Android developed by Google, except for the word “wey”, which in all years was used more by the IOS operating system developed by Apple, being the word most used by the social network Twitter in relation to the other words analyzed in this study. On the other hand, the tweets that use the word “wey” were analyzed to detect in what sense they express it, due to the fact that the word is a Mexicanism used as an offense, however, people, on many occasions, use it to colloquially address a person without calling him/her by name, since said word can be applied in the same way in the masculine or feminine context (Sinave, 2010).

However, the word “wey” can also be used as a synonym for anger, admiration or affection. According to the Real Academia Española and the Dictionary of Mexico, the correct way to write this word is “güey”, and it is defined as an unknown and despised person and often refers to being dumb. Therefore, in the present research, most of the expressions in the tweets when using the word “wey” are basically to start a conversation and make an expression of admiration.

On the other hand, when analyzing the messages that carry the word “pork”, they are used to ask or answer a question, in most of the comments they refer to giving an answer, however, grammatically it is not well written nor is it possible to differentiate the meaning of that word, as when it is written correctly: por qué; it is interrogative and is used to ask questions, or porque, to answer questioning.

ISSN: 2410-4191.
RENIECYT-CONAHCYT: 1702902

Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.
https://doi.org/10.35429/EJB.2024.20.11.17.27

According to the Real Academia Española, the use of “por qué” is a sequence formed by the preposition por and the interrogative or exclamative qué, commonly used in direct and indirect interrogative and exclamatory sentences (RAE, 2022).

Box 5

Table 5

Comparative analysis of the number of tweets containing the word “holi” in the months of July and December by year.

Tweets	2019/Jul	2019/Dec	2020/Jul	2020/Dec
Total	33,817	37,412	99,999	99,757
Android	17,940	21,878	62,649	60,570
Iphone	8,932	9,594	24,788	26,260
Ipad	175	179	570	675

Source: Own elaboration based on the analysis of the extracted data

As can be seen in Table 5, regarding the number of tweets sent in the months of July and December of the same year there is not much variation, however, from the year 2019 to 2020 if there is a significant difference, coupled with this on the results of the operating system used continues to predominate Google's Android, even when adding the information of users who use Apple's IOS.

Regarding the use of the word “holi” during the years 2019 and 2020, considering the months of July and December, the number of tweets containing it was obtained showing their totals in Table 5. “Holi” refers to the word “hello”, which according to the Real Academia Española is used as a familiar greeting, strangeness, or to call inferiors (RAE, 2020a), although it is also commonly used to start an informal conversation. According to Cabrejas (2012) the word “hola” is an Iberian acronym, which is defined as an interjection that is used in colloquial language in a friendly way, it is an exclamation that is used amicably, upon the arrival of a meeting or when shaking hands. It could also be related to the English “hello” and the German “hallo”.

As for the word “muxo” used in the social network Twitter, it is a way in which users abbreviate the word mucho, written in this way correctly, and sometimes use it as an adjective or adverb and indicates abundance or intensity of doing something.

Particularly in the tweets analyzed the messages are oriented to show affection towards other people, according to the Real Academia Española the word mucho refers to something abundant, or that exceeds the ordinary (RAE, 2020b).

On the other hand, the use of the word “tagueno” by Spanish speakers on Twitter is very common, and is used to indicate that something “is good” or “is fine”, and to express a feeling of conformity or that one agrees with something, even when the words are misspelled, communication flows and the meaning of the message fulfills the objective. In another sense, the word “no” is an adverb of negation that is placed before the verb to construct negative sentences and indicate that the user opposes an indication, however, in the world of chat and even in oral language, it is very common to observe the use of the word “nop” to deny, mainly in response to a question (RAE, 2020c), because since long ago there has been the habit of suffixing some words with endings that evoke English, mainly. However, nowadays and mainly with young people, the word game that seeks to use and create similar words, and that serve as forms of communication, is widely used. The same case happens with the word “sip”, which means affirmation, which denotes definitive assertion (RAE, 2020d), and the same modification is used as the word no, by adding the “p” at the end.

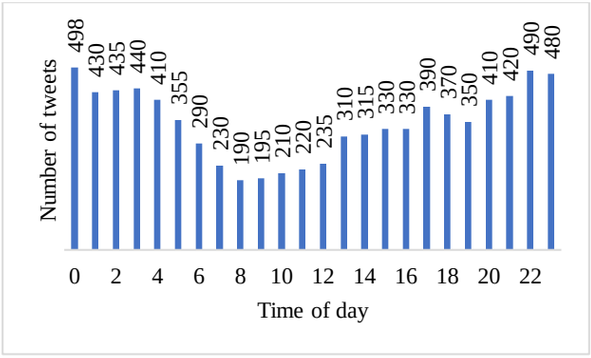
Finally, the word “ontas”, is used as a shorthand for asking where are you, and is supposed to refer to knowing the user's current location. It is an expression mainly of Mexican origin, however, in social networks it has generated a lot of confusion among users about the meaning of this question, because it can be used to propose a sexual encounter. The word “ontas” had a viral meaning in different social networks in 2019 especially on Twitter, and created controversy because at first it was used by Mexican fans to contact celebrities, who, not knowing usual expressions in Spanish, were victims of jokes product of the confusion, however, what seemed to be a local challenge became a trend mainly because of its true meaning in social networks (The Republic, 2019).

Likewise, an analysis of the incidence of tweets by each hour of the day was carried out, Graph 1 shows the corresponding distribution.

ISSN: 2410-4191.
RENIECYT-CONAHCYT: 1702902

Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.
https://doi.org/10.35429/EJB.2024.20.11.17.27

Box 6



Graphic 1
Average incidence of tweets per hour

Source: Own elaboration based on the analysis of the extracted data.

Graphic 1 considers all the words analyzed, observing that in the early morning hours this incidence is at a low level, while during the course of the day, in the afternoon and evening, this number increases.

Results

The present study examined, by means of statistical and computational methods, the incidence of various misspelled or abbreviated words in the social network Twitter, which were carefully selected through a questionnaire applied to young university students. It can be concluded that the current forms of digital communication have completely invaded the interaction between people, which causes that, in the messages sent or received, there are misspelled words, abbreviations or writing codes that often affect the way in which the Spanish language is written. After performing the pertinent analysis of the information obtained, it was determined that the word "wey" is the most used word by Twitter users during the period of analysis, and its use worsened during the pandemic period.

Likewise, the operating system most used for sending messages on Twitter is Google Android, followed by Apple IOS, with the exception of the word "wey" which is most used on mobile devices with Apple IOS.

On the other hand, it is interesting to analyze the messages to be able to interpret the sense in which they are sent to users, that is, if it is an offense, or a form of affection or anger and to be able to make a comparison with the true meaning of the word by the Real Academia Española.

Due to the immense amount of information, the analysis was limited only to the month of July in the period contemplating the years 2019 to 2022, and in a special case the analysis of the word "holi" in the months of July and December of the years 2019 and 2020, since in some occasions the incidence of certain words in a month exceeds 50,000 tweets. Another limitation was that, when using the corresponding library to extract the tweets, since it was neither official nor recognized by Twitter, it showed failures or intermittencies that delayed the obtaining of information.

Finally, when analyzing the messages issued by Twitter users, it is possible to detect that they adopt these forms of writing due to the constant interaction in social networks and it can be concluded that the message is expressed in a natural and unconscious way that becomes part of their daily vocabulary.

Discussions

The findings in this study suggest that the use of misspelled or abbreviated words is a growing trend among people who use the social network Twitter in Spanish, and that on the other hand it does not mean that the idea of conveying a message, idea or feeling among users is not affected.

In addition, it was found that users make use of the services provided by Twitter mostly at night and in the early hours of the morning, reducing their use in the mornings, which means that users are more active in non-working hours for most or in hours of rest either at school or at work.

Due to the nature of the information obtained, it was not possible to determine precisely the location of the users from where they use the social network, so we only have a record of the language they use, with the following locations being varied but not decisive: Latin America, United States, Spain, among others.

ISSN: 2410-4191.
RENIECYT-CONAHCYT: 1702902

Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.
https://doi.org/10.35429/EJB.2024.20.11.17.27

Surprisingly, an infinite number of tweets were found that at first glance do not include a precise and direct message for most people, but in certain groups of people, mainly young people, they have a perfectly understandable meaning, these messages are highly abbreviated and may include one or more of the words mentioned in this study and often accompanied by emojis, of the latter it is recommended to conduct a precise and detailed study on their meaning, frequency and conditions of use.

Likewise, it can be considered that the results of this research will be a contribution to the language and promotion of good writing, using technology as a basic tool to develop skills because by making use of predictive text the message can have an adequate quality in writing and thus inversely the user can deduce the correct way to write without modifying the Spanish language. However, nowadays it should be understood that social networks became part of people's daily lives, but what should not be normalized is bad writing regardless of the social network used, especially when the same technology through the mobile device "suggests" you to write the right word, even predicts common phrases.

This leads to good practices in the writing of Spanish, such as the form and speed of issuing a message, but it also leads to certain patterns of use of social networks and that make users no longer think, identify or manage to see if a message is written correctly or not, and therefore reduce the capacity and ability of the user in the correct writing of the Spanish language. In addition, it is not only the way of writing, but sometimes it is the spoken use of these misspelled words, and even the users have normalized their use. In addition, "the style of written communication used by young people on social networks Facebook and Twitter is fundamentally informal, spontaneous, free, unplanned and not subject to rules, and basically it is a daily conversation" (Vanegas Ramírez, 2014).

Because young people find in the various social networks a space for entertainment, fun and freedom, they are aware of what they write and the transformation of words causing them to develop in a digital context where speed, brevity and immediacy predominate.

For his part, Parra (2015) states that:

> "The factors that influence students to misuse virtual language are to use fast and quick communication that complements the way they want to communicate, adopt a personal language and basically show disinterest in maintaining our correct language. Although it is very complicated, this is a problem that arises since puberty and when we start using social networks, then it becomes a habit, it is in each of us to change this ideology, to think about the future and professional working life, to be interested in having a correct writing to get to form great performances" (p. 87).

Likewise, Llopis-Susierra (2019) mentions four main ideas about writing in social networks:

> "The first is that the language of social networks is in the process of transformation due to a change of attitude in adolescents and the use of spellcheckers; the second, that the influence of social networks on writing has a double aspect: positive and negative; the third, that the negative impact is greater in students whose spelling is less established; and finally, that spellcheckers are instruments for learning spelling" (p. 16).

Conflicts of interest

The authors declare that they have no conflicts of interest.

Contribution of the authors

The contribution of each researcher in each of the points developed in this research was defined on the basis of the following:

Lara-Torres, Claudia Guadalupe: Contributed to the idea of the project, methodology, elaboration of the strategies and instruments. She supported the application of the instrument as well as the analysis of results and the final revision of the research.

ISSN: 2410-4191.
RENIECYT-CONAHCYT: 1702902

Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.
https://doi.org/10.35429/EJB.2024.20.11.17.27

Velázquez-Macias, Jesús: Contributed to the bibliography search for the elaboration of the background and theoretical framework. I supported in the writing of the article as well as in the elaboration of tables and graphs, and in the systematization of the results and revision of the bibliographic citations.

Rodríguez-González, Beatriz Adriana: I contributed to the preparation of the summary, introduction, discussion of the results and conclusions. She also participated in the drafting of the article and revision of the bibliography.

Availability of data and materials

The data collected for this study were obtained by means of computational algorithms from the Twitter social network in a free form.

Funding

The research did not receive any funding.

Abbreviations

CSV	Comma Separated Values
GB	Gigabyte
IOS	iPhone Operating System
RAE	Real Académia Española
RAM	Random Access Memory

References

Background

Abednego, L., Nugraheni, C. E., y Fedora, A. (2022). Forex Sentiment Analysis with Python. International Journal of Advanced Research in Economics and Finance, 4(1), 46–55.

Britos, P. V. (2020). Comparative evaluation of Team Data Science Process TDSP y Analytics Solutions Unified Method for Data Mining ASUM-DM methodologies fron a data science perspective. Formative Research in Engineering, 264.

Cabrejas, E. (2012). HOLA. Etymological origin fixed by Enrique Cabrejas.

Fernández, F. (2008). The influence of the internet on spelling. Retrieved April 25, 2023.

García, J., Molina, J., Berlanga, A., Patricio, M., Bustamante, A., and Padilla, W. (2018). Data Science. Analytical Techniques and Statistical Learning. Bogotá, Colombia. Altaria Publications, SL.

Lemus-Delgado, D., and Pérez Navarro, R. (2020). Data science and global studies: Methodological contributions and challenges. Colombia International, 102, 41–62.

Mancera Rueda, A., and Pano Alamán, A. (2014). Social networks as a study corpus for computer-mediated discourse analysis.

Mocanu, D., Baronchelli, A., Perra, N., Gonçalves, B., Zhang, Q., and Vespignani, A. (2013). The twitter of babel: Mapping world languages through microblogging platforms. PloS one, 8(4), e61981.

Basic concepts

Avila Burgos, C. G., Grados Castillo, P. A., and Tejada Pacaya, K. M. (2016). Spelling in whatsapp.

Pazmiño Benavides, P. A. (2012). The impact of social networks and the Internet on the education of young people at the Salesian Polytechnic University: The case of the Social Communication career. [B.S. thesis].

Peñalver, E. A. (2019). Spelling in social networks: a new cover letter? Characters: cultural and critical studies of the digital sphere, 8(2), 156–177.

Pulido, M. B., Soto, Á. D., Lozano, F. M., and Peña, W. Q. (2021). Social networks and digital relationships, a communication that goes beyond face-to-face. International journal of pedagogy and educational innovation, 1(1), 123–148.

RAE. (2020a, june 25). Dictionary of the Spanish language (2001). «Essential dictionary of the Spanish language».

RAE. (2020b, june 25). A lot, a lot | Dictionary of the Spanish language (2001). «Essential dictionary of the Spanish language».

ISSN: 2410-4191.
RENIECYT-CONAHCYT: 1702902

Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.
https://doi.org/10.35429/EJB.2024.20.11.17.27

RAE. (2020c, june 25). No | Dictionary of the Spanish language (2001). «Essential dictionary of the Spanish language».

RAE. (2020d, june 25). Yes | Dictionary of the Spanish language (2001). «Essential dictionary of the Spanish language».

RAE. (2022, november 6). «Why» / «because» / «why» / «because». Real Academia Española.

Torres, J. (2017). Spelling and social networks. Wall Street International.

Supports

Abdulsalam, A., Alhothali, A., & Al-Ghamdi, S. (2024). Detecting Suicidality in Arabic Tweets Using Machine Learning and Deep Learning Techniques. Arabian Journal for Science and Engineering.

Hernández-Sampieri, R., Fernández Collado, C., and Baptista Lucio, P. (2018). Research Methodology (6th Edition). McGraw-Hill Interamericana Mexico.

Sarkar, T., and Rajadhyaksha, N. (2021). TLA: Twitter Linguistic Analysis.

Sinave, N. (2010). Analysis of linguistic attitudes towards Mexican slang: Uses and valuation of the word güey.

Williams, S. A., Terras, M. M., and Warwick, C. (2013). What do people study when they study Twitter? Classifying Twitter related academic papers. Journal of documentation.

Differences

The Republic (2019, July 29). What does Ontas mean? The new viral that is trending in social networks | Meaning of Ontas | Trends | The Republic.

Zarrabeitia-Bilbao, E., Morales-i-Gras, J., Rio-Belver, R. M., and Garechana-Anacabe, G. (2022). Green energy: Identifying development trends in society using Twitter data mining to make strategic decisions. Information Professional, 31(1).

Discussions

Llopis Susierra, M., and Andrés Sebastiá, M. (2020). Spelling in social networks and chat rooms: A new learning tool among teenagers.

Parra, C. A. S., Arámbula, R. E., and Castillo, R. A. M. (2015). Social Networks: Virtual language and spelling. Educateconciencia, 6(7), 75–88.

Vanegas Ramírez, M. H. (2014). Writing and social networks.

ISSN: 2410-4191.
RENIECYT-CONAHCYT: 1702902

Lara-Torres, Claudia Guadalupe, Velázquez-Macias, Jesús and Rodríguez-González, Beatriz Adriana. Spanish language trend on Twitter: an analysis of modern writing. ECORFAN Journal-Bolivia. 2024. 11-20: 17-27.
https://doi.org/10.35429/EJB.2024.20.11.17.27