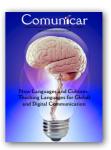
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Youth Frustration and Intergenerational Conflict on Twitter



Frustración Juvenil Y Conflicto Intergeneracional en Twitter

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ABSTRACT

In recent years, the generation has gained importance in the narrative of social change and conflict, as reflected in the spread of digital phenomena such as #OKBoomer, which highlighted the negative perception of this generation by later generations, popularising the term "boomer" as a pejorative adjective. In order to find out whether the use of this term is an expression of conflict and generational vindication, we downloaded more than 600,000 tweets, in Spanish, issued between November 2019 and December 2022, which contained the term "the boomers". Using supervised machine learning techniques, we quantified the percentage of tweets that, through the use of this term, expressed generational claims or conflicts. Subsequently, we used topic modelling techniques to investigate under which themes these are expressed. We found that, during this period, most of the tweets analysed expressed conflicts and demands, focusing on issues such as material and economic inequality, lack of opportunities to develop a life project and political issues. Everyday generational clashes were also observed, related to digital skills or attitudinal differences. In conclusion, behind the use of the term "boomer", claims of the younger generations are being expressed in the form of generational conflict, either by blaming the "boomer" generation for their situation or by denouncing the lack of empathy of the "boomer" generation towards them.

RESUMEN

En los últimos años el impacto generacional ha cobrado importancia en la narración de los cambios y conflictos sociales, tal y como se refleja en la difusión de fenómenos digitales como el #OKBoomer, que puso de manifiesto la percepción negativa hacia esta generación por parte de generaciones posteriores, viralizándose el término "boomer" como adjetivo peyorativo. Con el fin de descubrir si detrás del empleo de este término existen expresiones de conflicto y reivindicación generacional, se han analizados más de 600.000 tweets, en castellano, emitidos entre noviembre de 2019 y diciembre de 2022, que contenían el término "los boomers". Mediante técnicas de aprendizaje automático supervisado cuantificamos el porcentaje de los tweets que, a través del empleo de este término, expresaban reivindicaciones o conflictos generacionales. Posteriormente, utilizamos técnicas de modelado de temas para investigar bajo qué temáticas se expresan estas. Encontramos que, durante este periodo, la mayoría de los tweets analizados expresaron conflictos y reivindicaciones, centrándose en temas como la desigualdad material y económica, la falta de oportunidades para desarrollar un proyecto vital y cuestiones políticas. Tambien se observaron choques generacionales cotidianos, relacionados con habilidades digitales o diferencias actitudinales. Se concluye que con el uso del término "boomer" se estarían manifestando reivindicaciones de las generaciones más jóvenes en formas de conflicto generacional, ya sea responsabilizando a dicha generación de su situación o denunciando la falta de empatía hacia ellos.

KEYWORDS | PALABRAS CLAVE

Generational Conflict, Youth Frustration, Baby Boomers, Twitter, Topic Modeling, Machine Learning. Conflicto Generacional, Frustración Juvenil, Baby Boomers, Twitter, Modelado de Temas, Aprendizaje Automático.

1. Introduction

Research on generational conflict in the social sciences has traditionally been based on two theoretical corpuses. Mannheim (2013) laid the foundations for the analysis, denying the conception of generation as mere age cohorts and asserting that what constituted a generation was the experience of historical and political events from a similar point of view. After him, part of the academic production has focused on the theoretical debate about the conceptualisation of generation (Bengtson, 1975; Gilleard & Higgs, 2002; Kertzer, 1983; Thorpe & Inglis, 2019; Timonen & Conlon, 2015). On the other hand, authors such as Aboim and Vasconcelos (2014) propose, unlike Mannheim, the need to move from an overemphasis on political self-consciousness to a characterisation of generations as discursive formations that individuals relate to in order to construct self-identification.

The influence of Mannheim's theoretical postulates could be at the basis of a deficit of scientific production, especially from an empirical point of view, on generational conflict in Western post-industrial societies. We refer to researchers' rejection of generationism, which guided these early investigations in the field, and which holds that generation is the predominant explanatory factor in the social world as opposed to others such as social class (Purhonen, 2016). However, we believe that it is plausible and opportune to analyse expressions of generational conflict without falling into this type of reductionism, focusing on the motivations and perceptions of the subjects themselves.

In this respect, it might be useful to understand the meaning of generation, following the work of Kertzer (1983) or McCrindle and Wolfinger (2009), defined as a group of individuals born at a given time and who, as they develop together, share not only age, but also conditions, preferences, values, motivations, events, associations and experiences. Thus, five generations coexist in Western European countries: silent generation (born before 1950); baby boomers (born between 1951 and 1970); generation X (born between 1971 and 1985); generation Y or "Millennials" (born between 1986 and 2005); and generation Z or "Centennials" (born after 2006) (Díaz-Sarmiento et al., 2017; González-Ramírez & Landero-Hernández, 2021).

Outside the academic literature, the growing importance of generation in the narrative of social-political change and conflict in public debate is evident. Appellations such as "boomers" have become commonplace, while the problems of debt, housing, pensions, or the environment are routinely framed in generational terms (White, 2013). This is evidenced by the rise of newspaper articles, following the 2008 crisis, associating baby boomers with a series of cultural and economic problems for later generations. Thus, the boomer generation is discursively constructed in problematic terms. This comprehensive framework has even been promulgated by political representatives such as former British minister and MP David Willetts in his book "The Pinch: How the baby boomers took their children's future and why they should give it back" (2010).

However, in our opinion, what is most relevant is to understand to what extent, how, and why citizens of younger generations reproduce this type of discourse, which would express, at least in a first analysis, some type of generational conflict. Empirical research in this area is scarce, possibly due to the difficulties of traditional techniques for its correct measurement. However, especially from 2019 onwards, we can observe highly viral digital phenomena on social networks that allow us to make progress in research. One example is the hashtag #OKBoomer, which became one of the most talked about topics on Twitter and TikTok for several days in the US, Europe and Latin America at the end of 2019 (Lim & Lemanski, 2020). Its virality shows the role played by social networks in shaping a new way of communicating and helps to understand the capacity to influence public opinion (García-Marín & Serrano-Contreras, 2023). The expression became popular to express disagreement or frustration towards opinions, attitudes or behaviours considered typical of those belonging to the baby boom generation.

Scientific production regarding #OKBoomer has focused on analysing its origin, evolution, and cultural meaning. In turn, it explores the influence of social networks and digital culture on intergenerational communication and how intergenerational tensions can be manifested and debated online. Firstly, it is found that the term "boomer" in social networks is used both descriptively and as a pejorative appellation (Mueller & McCollum, 2022). This suggests the existence of generational conflict, which may be an underlying cause of increased ageism (Meisner, 2021). Other research is less negative and points out that #OKBoomer is a task of raising the awareness of younger generations based on the inequality they

perceive (Anderson & Keehn, 2020). A third group of contributions emphasise generational differences in coping with climate change and eco-anxiety (Swim et al., 2022) or in the way they understand the economy or labour relations (Díaz-Sarmiento et al., 2017; Frey & Bisconti, 2023; Saucedo Soto et al., 2018).

Also noteworthy are contributions that focus their empirical efforts on the analysis of data from social networks themselves. For example, Zeng and Abidin (2021) use #OKBoomer memes generated on TikTok as a case study to examine the political culture of youth generically and Generation Z specifically. Lim and Lemanski (2020) use Node XL, Google Trends and Nexus Nexis to collect and analyse data, concluding that there is a veiled generational conflict behind #OKBoomer, in line with race and gender struggles. More recently, Ng and Indran (2022) use TikTok to assess the content of the #OKBoomer hashtag and decipher the hostility expressed by younger people towards baby boomers, suggesting that the causes of the conflict are related to a reaction to negative encounters with and stereotyping of boomer youth, as well as value and economic conflicts between generations.

In short, #OKBoomer has been interpreted as an expression, through humour and irreverence, of economic and political frustration on the part of young people. They feel relative deprivation with respect to the "baby boomers" as they consider that they are held paternalistically responsible for their situation without taking into account the structural and material difficulties (Anderson & Keehn, 2020). In short, through this phenomenon, numerous socio-political and economic criticisms have been articulated against the boomer generation, which is presented in a homogenous way, and which relate to issues as diverse as access to housing, entry into the labour market, gender equality, climate claims or obstacles to social mobility (Anderson & Keehn, 2020).

Despite the works reviewed, there is still a considerable empirical gap that prevents us from consolidating the existing theoretical corpus about the motives behind the reality shown. We agree with Frey and Bisconti (2023) on the need to continue studying how this generational conflict is expressed in social networks, given that they constitute an important source of information. It could be argued that this type of analysis is uninteresting because, in reality, the content of generational conflict hides frustrations related to social class, even if it is not perceived as such by its participants (Sunkara, 2019). Along these lines, Bristow (2016) argues that the construction of the boomer generation as a problem is not produced by generational conflict, but by a mixture of economic stagnation and ideological confusion. In our opinion, although we may partially agree with this statement, we consider it necessary to study through which themes and forms this generational conflict is expressed, regardless of whether it makes substantive sense or not. After all, regardless of whether it is a generational conflict or not, the important thing is that this youth frustration is being expressed as such (Connolly, 2019).

2. Objectives

As we have shown, the aforementioned research has focused on qualifying them as such or on a theoretical approach to the causes that could be behind them, emphasising cultural differences and the sense of economic deprivation of young people in comparison with baby boomers (Bristow, 2016; Lim & Lemanski, 2020; Mueller & McCollum, 2022). However, there is still an empirical gap resulting from the difficulty of studying an eminently digital phenomenon using traditional analytical techniques.

For this reason, our main objective is to study the phenomenon derived from #OKBoomer through the use of massive data, "big data", obtained from the social network Twitter. Thus, this research is the first to carry out an exploratory analysis of this conflict on Twitter in the Spanish-speaking world using big data.

Two specific objectives derive from this general objective. The first is to find out whether the use of the term "boomers" is accompanied by the expression of some kind of conflict or generational claim, expressing economic or social grievances with respect to this generation. In doing so, we aim to quantify the extent of the phenomenon by observing what percentage of tweets express conflict or generational grievances and what percentage do not.

The second specific objective is to determine what issues are behind these expressions of generational conflict or demands already classified as such. We suspect, based on the academic literature, that they could have to do with economic grievances derived from difficulties of access to housing, unemployment or job insecurity; cultural issues linked to gender equality, environmental concerns or the expression of sexuality;

demand for political representation or institutional disaffection given the voices that point out that the electoral weight of the "baby boomers" hinders young people's capacity for political representation; or they could be related to other factors. Regardless of the outcome, we will quantify the extent to which they are related to one or the other issue.

In short, if we find expressions of conflict or grievance in the messages emitted by the younger generations, we intend to find out whether these have to do with what would be called "hard factors" or "soft factors". The former refers to specific variables that have a direct influence on people's quality of life and well-being and can therefore be measured with objective data and statistics (employment or housing). The latter, on the other hand, constitutes elements that are difficult to quantify, such as negative encounters with members of the boomer generation or attitudinal complaints. The prevalence of one or the other can give us several clues as to how this conflict might be accentuated in the coming years.

3. Methodology

To carry out this research, we have used data from Twitter, a popular social networking site. This provided a great source of information for the study of the emission and dissemination of opinions in our technologised societies. Although Twitter does not cover the entire population, the percentage of use among young cohorts is very high, which is well suited to the objectives of our research. Specifically, 61% of 18-24 year olds have a profile on this social network according to Comscore data (Twitter, 2022).

The data was extracted using the academic version of Twitter's Application Programming Interface (API), which allows a greater number of tweets to be downloaded and does not limit the dates of broadcast. Boomers" was the download term used as it gathered more information in Spanish than the viral #OkBoomer, the first search term used and subsequently discarded as it was mostly used as a mere response rather than to express broader opinions. Specifically, we downloaded 632,433 tweets of which 254,926 were original, the rest being retweets. We limit the broadcast period between November 2019 and December 2022. This work has been carried out using R software, through the "academictwitteR" library (Barrie & Ho, 2021). It should be noted that the 632,433 tweets downloaded are the total number of tweets issued with that term in the period studied and not a sample.

First of all, we will provide some general metrics on our database, such as the presentation of a sample of the most popular tweets by users through retweets and likes, although these have been slightly modified in their wording, changing some terms for synonyms, to avoid the identification of the author. After this, we used methods to fulfil our first objective: to corroborate whether any type of conflict or generational claim is expressed in the messages issued by users, and to quantify it. Given the large number of cases, it is necessary to perform an automated text classification based on supervised machine learning.

This is a big data technique that uses classification algorithms to generate predictive models based on an example sample, previously classified, and then applying the model to the rest of the sample, which has not been used to train the prediction model (Hvitfeldt & Silge, 2021). In our case, the population is Twitter messages, so that each tweet is a unit of analysis. To apply this computational method, we divide the universe of messages into an execution sample and an application sample. On the former, which consists of 2,500 tweets, we carried out a manual classification, dividing the tweets into those that express any type of conflict or claim (either directly or through humour or irony), and those that do not express it, or are purely descriptive or journalistic in nature. Here, we should point out that the instructions to the codifiers mandated that messages expressing any kind of grievance, however subtle, should be considered as conflictive.

With this, we compute the document-terms matrix representing the number of times each term appears in a tweet and with which we will subsequently build a model that assigns a weight to each word based on the expression of conflict and, based on the words that appear in the tweet, assigns the probability that this tweet expresses conflict or not. We then randomly split the annotated performance dataset into two groups: 80% for the training group and 20% for the test group. With the former we developed the algorithm, using generalised linear models (GLM). Thus, the following model is theoretically trained:

P (tweet express conflict) = $F(\beta 0 + \beta 1 \# Word1 + \beta 2 \# Word2 + ...)$

Where #Word1 is the number of times the word 1 appears. Building the algorithm means finding the best values of $\beta 1$ for the model to get the best performance in predicting whether tweets, from the training set, express conflict. Tweets are classified as expressing conflict if their probability of doing so is greater than 0.5. This algorithm, built with the glmnet library (Friedman et al., 2010) is a regularised logistic classification model, predicting a binary categorical variable, but adding regularisation to avoid overfitting the model by adding a penalty term to the original cost function, thus improving generalisability. Finally, the model built with the training set is applied to the annotated test set, so that we predict whether the tweets express conflict or not, and we can compare this prediction with the classification performed manually beforehand. With this, we calculate the confusion matrix, which indicates how many cases are correctly classified by the model, and we calculate the goodness of fit of the model, i.e. its ability to predict adequately. For this purpose, we use the classical evaluation metrics for supervised machine learning models (Kelleher et al., 2015): "accuracy", which measures the percentage of cases that the model gets right; "precision", which expresses the percentage of predicted positives that actually are; "recall", which expresses the percentage of actual positives that we have correctly identified; and F2, which is an average that combines "precision" and "recall" as a single value. Once a model with optimal predictive ability is achieved, it is applied to the entire database, except for those on which the model has been built to avoid bias. Thus, we automatically classify the remaining 252,426 tweets.

Once the tweets have been classified into those that express conflict or generational claims and those that do not, we are in a position to proceed with our second objective and determine through which themes these conflicts are expressed. To do this, we will use topic modelling techniques, which are unsupervised classification techniques in which messages are grouped into different topics without the need for prior classification. It is noteworthy that, although this technique tends to be used in larger texts, such as newspaper articles, there are already some studies that have successfully applied it to tweet analysis (Calderón et al., 2020). Unlike supervised methods, such as the previous one, where prior categories are defined and a model is trained on them, in topic modelling topics are discovered as documents are grouped into them, allowing tweets to belong simultaneously to several topics. We will use the most common algorithm in topic modelling, Latent Dirichlet Allocation (Blei et al., 2003), in which each tweet is replaced by the term frequency matrix, and the model tries to find clusters of terms (topics) that explain why some documents are similar. For Jacobi et al. (2016), "topics are detected by discovering patterns in the presence of concurrent word clusters in documents" (p. 3). To implement topic modelling, we will use the R library topic models (Grün & Hornik, 2022). After this, we will adjust the number of topics to be extracted that the algorithm will be asked to extract, optimising the model so that the least number of topics is extracted without losing information. To do this, we will resort to the "Idatuning" library (Nikita & Chaney, 2020), and the metrics of CaoJuan2009, Arun2010, Deveaud2014 and Griffiths 2004, which indicate what number of topics to extract is most appropriate through the convergence of the minimisation of the first two metrics and the maximisation of the second.

4. Analysis and Results

Table 1 shows the text and metrics of the ten tweets with the greatest dissemination in the period studied. Although we initially intended to show those with the most "retweets" and "likes", in the end we constructed a single table since both coincided.

As we can see, the most popular tweets mostly express forms of generational conflict. Of the ten tweets presented, five show grievances or economic demands in generational terms, alluding to problems of access to housing, unemployment or precariousness, either directly or through humour and irony. The remaining five could be roughly framed as expressions of generational vindication of a cultural nature, alluding to conflicts of values, either by categorising boomers as more conservative on issues related to feminism or sexuality, or by alluding to their less critical capacity to discern hoaxes on social networks. Interestingly, most of the most widely disseminated messages take the form of a response to a perceived stereotype constructed by boomers. This is most clearly seen when young people consider themselves to be classified as "offended" or "glass generation" by the "boomers".

Table 1: Tweets with a Higher Diffusion through Retweets and Likes.	
Mid-August. The newspaper boomers are on holiday. The intern who has been left to work s	
the desk. He's barely paid, working twice the stipulated hours. And he has nothing to lose. He	puts
his hands on the keyboard and starts typing:	RT: 9050
The young people of today are no worse than the young people of yesteryear. With statistics in hand	d, it's LK: 34688
quite the opposite: they are more cautious, responsible and studious than the millennials; and they sn	
drink and take drugs less than in the nineties. Their problem is called unemployment and precarious	
Young people with conservative ideas annoy me. Boomers at least have the excuse of saying that	
have lived like this all their lives. But what about you?	LK: 31307
Boomers: Young people have a lot of birds in their heads and only think about nonsense.	RT: 5722
Young people: "I wish I could be a mileurista".	LK: 27813
Do you remember when we young people started to have mobile phones and the boomers were s	Super RT: 4374
annoyed that we didn't believe anything we saw on the Internet and now they are the first on	os to N1: 43/4
believe any hoax they see on Facebook?	LK: 19939
Boomers freaking out in case their kids see two women kissing in a Disney movie.	
Young people who want to have children: *shuddering because of precariousness*.	LK: 24532
boomers be like: "The teachers used to hit me with the wooden ruler on my fingernails and the	n my
father used to hit me with his leather belt and look, I turned out fine, you damn offenders" *proc	100ds KI: 3934
to abuse everyone around him*.	LK: 15636
House prices have risen 42% in 16 years, average wages have fallen 16%. No boomers and can	ners, RT: 3302
it is not for lack of "effort". Today wages are much less than enough to buy a house.	LK: 12015
According to the US Federal Reserve, millennials own 4.6% of all wealth. At the same age, Gener	ation
X (1965-1981) had 9% of the wealth. Boomers had 21%. The most educated generation in his	tory N1: 2200
we are also the poorest generation.	LK: 6102
Boomers: "Today's boomers are the #GeneracionDeCristal. Everything offends them" "boom	ners" RT: 1152
when you talk about feminism, equal marriage or legal abortion: *they get offended*.	LK: 4275
Then yes tam accest forminism, equal marriage of legal accition. They get offended.	211. 1217

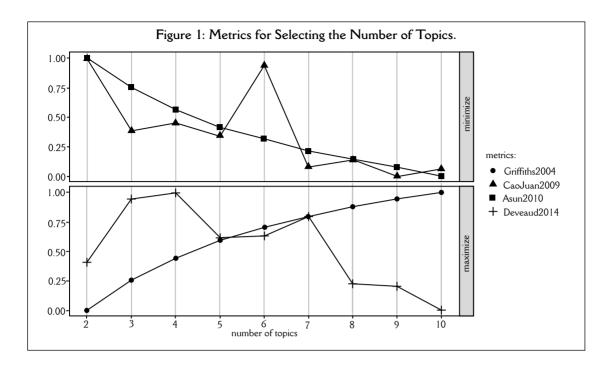
Next, we present the metrics of the algorithm created through supervised machine learning methods (Table 2). This algorithm was trained by manually classifying 2,500 tweets, of which 46% did not express any type of conflict and 54% did. Of these 2,500 tweets, 80% were used to train the algorithm and the remaining tweets were tested for their predictive capacity.

Tabla 2: Métricas de Evaluación del Modelo.		
Accuracy:	0,705	
Precision	0,720	
Recall	0,784	
F1	0,750	

Once the algorithm had been trained and evaluated, we classified the rest of the tweets (Table 3). Of the 252,426 tweets issued about the "boomers", not used to build the model, 60.35% express conflicts or complaints about them. Although this may not seem an excessively high percentage, it means that more than half of all tweets issued under the term "boomers" in the studied period relate to some kind of grievance or generational claim. Consequently, the results obtained for the fulfilment of the first objective give an affirmative answer to the question of whether the use of the term "boomers" is accompanied by expressions of generational conflict.

Tabla 3: Clasificación de Tweets Originales con Aprendizaje Automático.			
	Frequency	Percentage	
Conflict	152.599	60,35%	
No conflict	99.827	39,65%	
Total	252.426	100%	

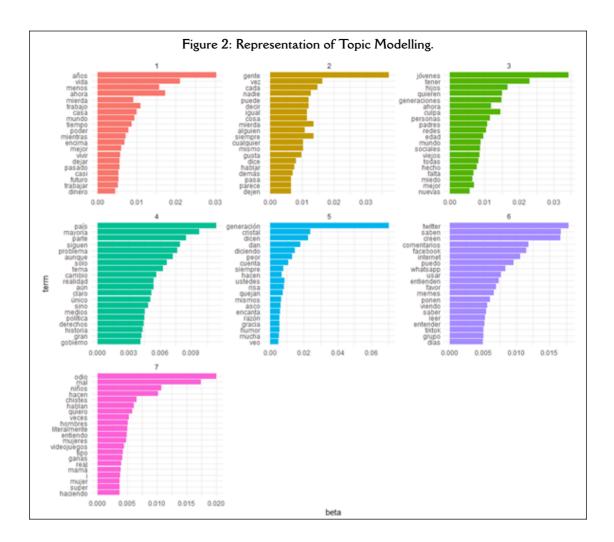
The second objective was to find out under which themes the conflict in question is expressed, and to do so we filtered the tweets using only those classified by our model as expressions of generational conflict. We used the methodology already described, "topic modelling" techniques, which automatically detect the underlying themes and allow us to determine the appropriate number of themes to extract.



The four metrics depicted indicate how many themes should be extracted to be exhaustive without adding unnecessary inputs. The metrics to minimise follow a parallel trend (Figure 1) with the exception of the extraction of six topics. However, the metrics to maximise show a large disparity between them, with Deveaud2014 reaching its maximum in the extraction of four topics and its minimum in the extraction of ten, where Arun2010 reaches its maximum. For this reason, although the extraction of ten is the ideal point for three of the four metrics, we opted for the extraction of seven topics as it is the ideal point if we do not want to disregard any of them. Once the number of themes to be extracted has been decided, we present the grouping of words visually (Figure 2), and their corresponding interpretation.

Theme 1: Economic/material grievances or demands. We categorised the first theme in this way given the concatenation of the words work, house, money, work, or future, which refer to material issues. An example of a tweet that has been catalogued is "How can we not get depressed if there are no jobs, no vacancies, no benefits, we don't have the facilities to buy a house and a car like we used to. At our age the boomers already had all that". In this way, a suspicion is shown towards the "baby boomers" who were able to benefit from periods of economic growth and stability that are now understood to be inaccessible. This includes criticism of housing, job opportunities, pensions and access to social services.

Theme 3: Grievances or Vital Assertions. We name the third theme "Grievances or Vital Assertions" due to the conjunction of terms like youth, having, children, blame, parents, or age. It is indeed true that we come across two distinct types of tweets. The first one emphasises the perceived difficulties that the youth face in developing a life similar to what previous age cohorts are believed to have had, especially concerning parenthood. However, at this point, tweets are also identified that defend the right not to have children and not to be judged for it. We extract an example of each categorised approach: "Boomers blame us for our generation not wanting to have children and fail to realize that more than not wanting to have children, it's that we don't want to bring lives into the world without having mental and economic stability." "It amuses me how boomers are surprised that we don't want to have children and are searching for an explanation, when the reason is simply No." In this theme, both the financial security of younger generations, perceived as lower than that of the "baby boomers," which hinders them from developing a life project, as well as changes in values regarding this generation, play a role.



Theme 4: Political Grievances or Claims. This conceptualization arises from the accumulation of words such as country, majority, issue, politics, rights, or government, which refer to political matters. "Young people should come together more to demand a political change in the UK and to be taken more seriously. It can't be that we let the boomers make politics for boomers and drag us into the abyss," is an example of a tweet. Thus, the youth, who have experienced various economic crises (particularly the great recession and the debt crisis), blame the boomer generation for implementing economic, social, and environmental policies that have gone against their interests.

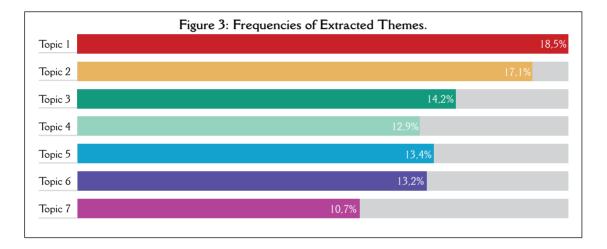
Theme 5: Response to Stereotype. This theme involves a reaction to the perceived prejudice from the boomers towards their generation, manifested through labels like "generation of glass" and accompanied by verbal constructions that refer to others, such as they say, saying, do, or complain. For instance: "They call us the generation of glass and claim that we ruined everything, but it was you who made us fix this messed-up society, boomers." We have observed that when young people encounter the label "generation of glass" on social media, they tend to emphasize their claims in the form of generational conflict, as they don't feel understood but rather held responsible for the situations that harm them.

Theme 6: Critiques of Digital Usage. This theme is centred around the sequence of words Twitter, comments, Internet, WhatsApp, Facebook, understand, use, or memes. It is the way in which the behaviour of boomers is referred to in relation to the use of social media and digital applications, particularly their limited knowledge and understanding of virtual relationships, as well as what is considered poor practices reflected through unfortunate comments and messages, like the one we're illustrating: "Boomers think they know everything about every damn topic in the world and all they do is spread hoaxes on Facebook, I just have to laugh at their audacity."

In this regard, young people accuse the boomer generation of digital obsolescence, despite it being an essential requirement in an ever-changing job market.

Theme 7: Attitudinal Critiques. In this category, more generally than before, critiques of behavioural nature are encompassed, often beginning with the verb "hate." These critiques tend to carry a marked gender character, with words like women, woman, men, or jokes, as illustrated by this example: "I hate boomer jokes where the whole damn show is just about belittling or making their wives feel bad, because it is always the women who are crazy, who talk to them rudely, who mess things up, and poor men." In this context, young people display a reaction that can be described as discomfort, leading to disapproving comments.

Regarding the second theme, we consider it lacks substantial meaning due to the limited coherence of the included words (people, time, each, or nobody). This is common in "topic modeling" techniques, as the extracted themes don't always maintain internal coherence, especially when working with short texts like tweets. After categorizing and describing the extracted themes, which help us understand the expression of generational conflict, we quantify and represent their frequencies.



The majority of the generational conflict (Graph 3) is expressed through the first theme: grievances or claims in comparative terms about economic matters. In second place, we find grievances or vital claims, especially regarding the issue of parenthood. Following this, there are responses to the stereotype that "boomers" construct about the youth. In fourth place, there are critiques of technological skills, followed by political claims and grievances, and finally, attitudinal critiques, where gender issues hold weight.

5. Discussion and Conclusions

The increasing significance of generational analysis in public discourse is evident. Public debt, housing accessibility challenges, climate change, and shifts in values, among other issues, are often narrated in generational terms (White, 2013), occasionally pointing to "boomers" as causes of harm to subsequent generations (Bristow, 2016). Therefore, we found it interesting to study the use of the term "boomer," popularized by the #OKBoomer phenomenon, to uncover whether behind its usage lay forms of generational conflict and to discover which underlying themes were present. After collecting and analyzing over 600,000 tweets using machine learning techniques, we confirmed that the majority of the tweets emitted held a conflictive or assertive nature. Our findings align with previous research (Mueller & McCollum, 2022) that indicates forms of generational conflict underlying the use of this concept. Thus, we validated that "boomers" are being perceived problematically by younger generations. Additionally, we aimed to understand the thematic aspects underpinning these conflicts using topic modeling techniques. We observed a prominent presence of "hard factors" (Topics 1, 3, and 4), encompassing 45.6% of expressions of conflict related to economic, political, and vital claims. Nonetheless, we also identified "soft factors" (Topics 5, 6,

and 7), constituting 37.3% of tweets, which broadly represent everyday intergenerational clashes tied to digital skills and attitudinal critiques.

Of greater importance, in our view, are the "hard factors". The most abundant theme, "Topic 1," relates to economic/material grievances concerning wages, housing, or employment. This outcome is not surprising, given the youth's precarious job situation marked by low wages and challenges in achieving residential independence, which is supported by INJUVE's research (2020). More surprising is that "Topic 3," vital claims emphasizing the perceived impossibility for young people to lead a life like that of previous generations, is the second most prevalent theme. We believe that this might be due to the aspirations expressed by young people regarding the age of motherhood and desired number of children, which stands at an average of 28 years and 2 children for Spanish women, as concluded by GAD3 (2020). However, the current average age of motherhood is 32 years, and the average number of children is 1.3. Clearly, both the survey itself and a majority of the tweets within this theme affirm that economic factors are responsible for the misalignment between desires and reality in many cases. In other words, this issue could be seen as a derivative of "Topic 1".

The dominance of these themes aligns with the findings from the "Eurobarometer" (Comisión Europea, 2021)dNote>, which indicates that the concerns of youth revolve around unemployment and lack of job opportunities, precariousness, housing accessibility, social protection, gender equality, as well as environmental issues. With these data, it becomes easy to comprehend the prevalent sentiments of youth frustration frequently appearing in the tweets.

However, the most intriguing aspect is understanding why these claims translate into forms of generational conflict. Here, the "Topic 5" would play a pivotal role, as it encompasses tweets that respond to the stereotypes that young people perceive towards their generation from the boomers, especially with the derogatory label "generation of glass." Thus, it is plausible to consider that when young people are subjugated and discredited through derogatory labels that undermine the legitimacy of their claims, and furthermore, they perceive a comparative grievance in relation to the situation of those who precisely disparage them, these claims manifest as generational conflicts.

In addition, we must consider the results of "Topic 4," which expressed the young perception that those who could address their claims through public policies are held captive by the electoral majority of boomers, whose vote becomes a prized asset for political parties and influences government management.

In conclusion, the results presented indicate the existence of significant critiques and vital claims of great importance for the configuration and life development of the young individuals voicing them. These should be taken into account for the formulation of public policies, especially in the realm of material well-being. Regardless of the actual responsibility that other generations may bear in these situations, it would be advisable to take these claims seriously, as they express significant perceived comparative grievances. Notably, they demonstrate that young people appreciate that the boomer generation, far from empathizing with their situation, attacks and blames them with derogatory labels like "generation of glass." Neglecting these findings could exacerbate age-based discrimination, as found in previous research (Walker & Naegele, 1999), and lead to a loss of social cohesion.

In conclusion, the research presents typical limitations associated with the use of big data techniques (difficulty in delving into the content of claims, attributing causal responsibilities, or the inability to differentiate by the tweeting country since geolocated messages are sparse). However, it allows us to verify the existence of conflict and underlying claims related to the use of the term "boomer" on Twitter by younger generations. Additionally, we have confirmed that the majority of assertive tweets express concerns related to the economy, life projects, or political matters. In this regard, future research should precisely aim to shed light on the described limitations related to the depth of content and the attribution of responsibilities of young individuals concerning their grievances, for instance, through the use of qualitative research techniques. Furthermore, another avenue of exploration is the generational differentiation by gender found in our research, as "boomers" tend to be presented as a distinctly male category, which could be understood, according to gender studies, based on conflicts of values. Finally, we believe that our research can contribute to the improvement of public policy design aimed at youth, at least regarding the understanding of the expression of their claims.

Author Contribution

Concept, VG, AM, CG; Literature Review, AM, CG; Methodology, VG; Data Analysis, VG; Results, VG, AM, CG; Discussion and Conclusions, VG, AM, CG; Writing, VG, AM, CG; Final Revisions, VG, AM, CG.

References

- Aboim, S., & Vasconcelos, P. (2014). From Political to Social Generations: a Critical Reappraisal of Mannheim's Classical Approach. European Journal of Social Theory, 17(2), 165-183. https://doi.org/10.1177/1368431013509681
- Anderson, M., & Keehn, G. (2020). Ok Boomer: Internet Memes as Consciousness Building. Radical Teacher, 118, 56-63. https://doi.org/10.5195/rt.2020.746
- Barrie, C., & Ho, J. C.-t. (2021). Academictwitter: an R Package to Access the Twitter Academic Research Product Track V2 Api Endpoint. *Journal of Open Source Software*, 6(62), 3272. https://doi.org/10.21105/joss.03272
- Bengtson, V. L. (1975). Generation and Family Effects in Value Socialization. *American Sociological Review*, 40(3), 358-371. https://doi.org/10.2307/2094463
- Blei, D. M., Ng, A. Y., & Jordan, M. I. (2003). Latent Dirichlet Allocation. *Journal of machine Learning research*, *3*, 993-1022. https://go.revistacomunicar.com/7igrPz
- Bristow, J. (2016). The Making of 'boomergeddon': the Construction of the Baby Boomer Generation as a Social Problem in Britain. *The British Journal of Sociology*, 67(4), 575-591. https://doi.org/10.1111/1468-4446.12206
- Calderón, C. A., de la Vega, G., & Herrero, D. B. (2020). Topic Modeling and Characterization of Hate Speech Against Immigrants on Twitter Around the Emergence of a Far-right Party in Spain. Social Sciences, 9(11), 188. https://doi.org/10.3390/socsci9110188
- Comisión Europea. (2021). Youth and Democracy in the European Year of Youth. Comisión Europea. https://bit.ly/47iJrX8
- Connolly, J. (2019). Generational Conflict and the Sociology of Generations: Mannheim and Elias Reconsidered. *Theory, Culture & Society, 36*(7-8), 153-172. https://doi.org/10.1177/0263276419827085
- Díaz-Sarmiento, C., López-Lambraño, M., & Roncallo-Lafont, L. (2017). Entendiendo Las Generaciones: Una Revisión Del Concepto, Clasificación Y Características Distintivas De Los Baby Boomers, X Y Millennials. *Clío América, 11*(22), 188-204. https://doi.org/10.21676/23897848.2440
- Frey, K. T., & Bisconti, T. L. (2023). "Older, Entitled, and Extremely Out-of-Touch": Does "OK, Boomer" Signify the Emergence of a New Older Adult Stereotype? *Journal of Applied Gerontology*, 42(6), 1200-1211. https://doi.org/10.1177/07334648231154044
- Friedman, J., Hastie, T., & Tibshirani, R. (2010). Regularization paths for generalized linear models via coordinate descent. *Journal of statistical software*, 33(1), 1-22. https://doi.org/10.18637/jss.v033.i01
- García-Marín, J., & Serrano-Contreras, I.-J. (2023). (Un) Founded Fear Towards the Algorithm: Youtube Recommendations and Polarisation. Comunicar, 31(74), 61-70. https://doi.org/10.3916/C74-2023-05
- Gilleard, C., & Higgs, P. (2002). The Third Age: Class, Cohort or Generation? *Ageing & Society*, 22(3), 369-382. https://doi.org/10.1017/S0144686X0200870X
- González-Ramírez, M. T., & Landero-Hernández, R. (2021). Diferencias en Tolerancia a La Frustración Entre Baby Boomers, Generación X Y Millennials. Ansiedad y Estrés, 27, 89-94. https://doi.org/10.5093/anyes2021a12
- Grün, B., & Hornik, K. (2022). Topicmodels: Topic Models. R package version 0.2-13. https://bit.ly/43SEbpU
- Hvitfeldt, E., & Silge, J. (Eds.). (2021). Supervised Machine Learning for Text Analysis in R (1st ed.). Chapman and Hall/CRC Press. https://doi.org/10.1201/9781003093459.
- INJUVE. (2020). Informe de la Juventud en España. Instituto de la Juventud. https://bit.ly/43h9cE9
- Jacobi, C., Van Atteveldt, W., & Welbers, K. (2016). Quantitative Analysis of Large Amounts of Journalistic Texts Using Topic Modelling. *Digital journalism*, 4(1), 89-106. https://doi.org/10.1080/21670811.2015.1093271
- Kelleher, J. D., Mac Namee, B., & D'Arcy, A. (2015). Fundamentals of machine learning for predictive data analytics: Algorithms, worked examples, and case studies. The MIT Press. https://go.revistacomunicar.com/g1JI7J
- Kertzer, D. I. (1983). Generation as a Sociological Problem. Annual review of sociology, 9(1), 125-149. https://doi.org/10.1146/annurev.so.09.080183.001013
- Lim, Y. J., & Lemanski, J. (2020). A Generational War is Launched With the Birth of Ok Boomer in the Digital Age. *The Journal of Society and Media*, 4(1), 1–15. https://doi.org/10.26740/jsm.v4n1.p1-15
- Mannheim, K. (Ed.). (2013). Essays on the Sociology of Knowledge. Routledge. https://doi.org/10.4324/9781315005058.
- McCrindle, M., & Wolfinger, E. (2009). The ABC of XYZ: Understanding the Global Generations. University of New South Wales Press. https://go.revistacomunicar.com/HnsBkX
- Meisner, B. A. (2021). Are You Ok, Boomer? Intensification of Ageism and Intergenerational Tensions on Social Media Amid Covid-19. Leisure Sciences, 43(1-2), 56-61. https://doi.org/10.1080/01490400.2020.1773983
- Mueller, J. C., & McCollum, J. (2022). A Sociological Analysis of "ok Boomer". Critical Sociology, 48(2), 265-281. https://doi.org/10.1177/08969205211025724
- Ng, R., & Indran, N. (2022). Hostility Toward Baby Boomers on Tiktok. *The Gerontologist*, 62(8), 1196-1206. https://doi.org/10.1093/geront/gnac020
- Nikita, M., & Chaney, N. (2020). *Idatuning: Tuning of the Latent Dirichlet Allocation Models Parameters*. R package version 1.0.2. https://bit.ly/44Q36vF
- Purhonen, S. (2016). Generations on Paper: Bourdieu and the Critique of 'generationalism'. Social Science Information, 55(1), 94-114. https://doi.org/10.1177/0539018415608967
- Saucedo Soto, J. M., Hernández Bonilla, A., de la Peña de León, A., Amezcua Núñez, B., & López González, G. P. (2018). Baby Boomers Una Generación Puente (Baby Boomers: a Bridge Generation). Revista Internacional Administración & Finanzas, 11(3), 47-56. https://bit.ly/3rVkh0n
- Sunkara, B. (2019, November 6). Why it's time to ditch the 'OK Boomer' meme. The Guardian. https://bit.ly/45oOt36
- Swim, J. K., Aviste, R., Lengieza, M. L., & Fasano, C. J. (2022). Ok Boomer: a Decade of Generational Differences in Feelings About Climate Change. *Global Environmental Change*, 73, 102479. https://doi.org/10.1016/j.gloenvcha.2022.102479

Thorpe, C., & Inglis, D. (2019). Do 'global Generations' Exist?: From Mannheim to Beck and Beyond. *Youth and globalization*, 1(1), 40-64. https://doi.org/10.1163/25895745-00101003

Timonen, V., & Conlon, C. (2015). Beyond Mannheim: Conceptualising How People 'talk'and 'do'generations in Contemporary Society. Advances in life course research, 24, 1-9. https://doi.org/10.1016/j.alcr.2015.03.001

Twitter. (2022, 6 de octubre). Así Es La Gen Z en Twitter. Twitter. https://bit.ly/3OAT8bQ

Walker, A., & Naegele, G. (1999). The Politics of Old Age in Europe. Open University Press. https://go.revistacomunicar.com/Wx7xoQ White, J. (2013). Thinking Generations. The British Journal of Sociology, 64(2), 216-247. https://doi.org/10.1111/1468-4446.12015 Willetts, D. (2010). The Pinch: How the Baby Boomers Took Their Children's Future-and Why They Should Give It Back. Atlantic Books. https://go.revistacomunicar.com/HelKuc

Zeng, J., & Abidin, C. (2021). '# Okboomer, Time to Meet the Zoomers': Studying the Memefication of Intergenerational Politics on Tiktok. *Information, Communication & Society, 24*(16), 2459-2481. https://doi.org/10.1080/1369118X.2021.1961007