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INTRODUCTION TO SPECIAL ISSUE

INCIVILITY AND PUBLIC PARTICIPATION

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Freedom of expression is one of the individual rights that must be present in any democratic social system. Citizens exercise this freedom by circulating messages and content through a variety of channels, from face-to-face oral communication to a growing repertoire of communicative exchanges mediated by digital technologies. Although it is difficult to have an objective measurement of these symbolic processes, the amount of content that is broadcasted and received daily has steadily grown during the last decades. Technological innovations, together with their successful social and commercial diffusion, mean that citizens face a volume of information that threatens to overwhelm their information processing capacity. This feeling of being overwhelmed by a flow of communication that surpasses our attention generates individual and social problems that confront us with one of the paradoxes of our time: the volume of information has increased considerably, but the feeling of a lack of intellectual handles and practical skills to manage this avalanche of content generates unease and unrest.

Under this growing flood of messages circulating in our closest environment and materialising daily on the screens of our electronic devices, new threats also emerge in terms of the form and substance of this content. The possibility of expressing ourselves freely, both individually and collectively, should function as the cement that makes dialogue and cooperation within civil society possible, but we often find that these communicative exchanges are aimed at eroding coexistence among equals. Consequently, freedom of expression is of little use when it is not based on respect for those who do not share our views. Diversity of ideas emerges, in this context, as a value to be promoted and defended to build an open, plural, and democratic society.

This Special Issue addresses how online incivility and toxic talk are changing the context and forms of mediated public participation. Although incivility is very difficult to define, with notable variations among scholars, it can be considered as a set

of behaviours that threaten democracy and deny people their personal freedoms (Papacharissi, 2004), frequently including elements such as intimidation, disrespectful speech, hostility and hate speech. Incivilities traditionally associated with risk behaviours in the cities (Park, 1984; Roché, 1996) are now transposed to online environments with a huge impact in peoples' lives.

Incivility has effects on those who encounter it, whether as participants or observers often in negative ways (Kenski, Coe, & Rains, 2017), such as the "nasty effect" of encouraging negative perceptions of issues (Anderson et al., 2014, 2018) and political arguments (Mutz, 2007). Incivility also has a polarizing effect pushing people to extreme positions. However, although the phenomenon of incivility and its potential effects is rather extensively present in the scholarly literature, the ways by which publics and audiences interpret and act on incivility and online toxic environment is a less visible topic.

Online incivilities call for social imaginaries of the media related to its engagement of people through conflict and contestation, through its potentially harmful or fatal consequences to individuals, society and democratic politics as well as being a source of moral panic anxieties (Critcher, 2008). Audiences use strategies of self-regulation against invasiveness (Syvertsen, 2017), also because they are seen as responsible for their online choices (Syvertsen, 2020), developing coping strategies to deal with unpleasant online experiences.

The appeal to civic mindedness takes on greater meaning in a digital scenario in which some of the basic rules for constructing a balanced and rational communicative action are experiencing fissures. The idealistic gaze of the early stages of the spread of Internet has had to confront a much harsher reality, in which anonymity and emotional distance mean that some of the filters and brakes we use in our face-to-face interactions are diluted, opening the door to much more blunt and aggressive behaviours.

This Special Issue of *Mediální studia / Media Studies* is composed by four articles that address different aspects of the proposed topic, offering complementary approaches to a multifaceted phenomenon in which social and communicative practices with different interests converge.

The first contribution, co-authored by Magdalena Saldaña (Pontificia Universidad Católica de Chile) and Valentina Proust (University of Pennsylvania, USA), opens this monograph with a title, "Comments that hurt: Incivility in user-generated comments about marginalised groups", which points to a factor of great importance for correctly contextualising discourses based on incivility: these messages hurt the people they are talking about, or at least they have the potential to create this effect. The relational dimension thus takes on a centrality that should not be forgotten when we analyse the conversations on social networking sites. In this work, relations between marginalised groups and hegemonic groups can lead to aggressive and derogatory content towards minorities, as evidenced by the content analysis carried out of the

comments posted by users in reaction to a Chilean digital newspaper's coverage of the LGTBQ+ movement.

In her article titled "Facebook as a public arena for women: infringing on democratic ideals and a cause of worry", Hilde Sakariassen, from University of Bergen (Norway), approaches a research dimension on social networking sites that has traditionally received less attention than the study of the published online content. Women's perception of the characteristics and quality of the public space that is constructed on Facebook confronts us with the concerns and tactics deployed by Norwegian women to adapt to a predominantly hostile space. Concerns emerging from these aspects become a highly relevant explanatory factor when one tries to understand their behaviour on the main social network site within the global corporation Meta.

The third article, co-authored by Anda Rožukalne and Dite Liepa (Rīga Stradiņš University, Latvia), is set in the context of the COVID-19 pandemic that shook the planet and confronted a wide portion of our humanity, in a widespread manner during the lockdowns, with the goodness and rawness of digital conversation. The article "From 'Covid idiots' to 'Covidshow' and 'Covidhysteria'. Analysis of digital news commenters' verbal aggressiveness and means of linguistics creativity during COVID-19 pandemic in Latvia (2020-2021)" uses a research tool that records and measures aggressiveness on the Internet to explore patterns of generating new linguistic terms. By exploring the content of three Latvian digital media, they provide interesting insights into the dynamics of popularisation and extinction of terms that sprout in everyday language, aspiring to become useful words to describe realities marked by their own fugacity.

The fourth contribution, "Mapping emotional responses across the individual moral system in Social Network ethical public communication: a quasi-experimental study", closes this Special Issue with a study that analyses, by means of quasi-experimental methods, the process of generating emotional responses based on different informative frames on a conflictive topic, such as the reception of migrants in Italy. The contribution of Ernestina Lamponi, Marinella Paciello (both affiliated at the International Telematic University Uninettuno, Italy) and Francesca d'Errico (Universittà degli Studi di Bari Aldo Moro, Italy) is useful to identify clues about the way in which a given media coverage can affect, positively or negatively, the dynamics of ideological polarisation perceived in the digital scenario when dealing with ethical dilemmas.

Although the content of this Special Issue may echo and amplify pessimism regarding the online dialogue we are producing, the message we wish to convey is that a culture based on mutual respect must emerge and prevail in online dialogue. Identifying risks and bad practices is necessary to define new courses of action that can readdress social priorities. An open confrontation of arguments is necessary to build a public sphere that reaches consensus and stimulates active participation and relevant social engagement. However, in many of the mediated practices identified in the four selected articles we can also perceive the other side of the coin, locating

opportunities for widening the space for democratic space in online environments, and strengthening its foundations. Following Masullo Chen et al. (2019), incivility is a complex concept that keeps calling for scholarly inquiry anchored in diverse analytic perspectives.

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REFERENCES

Anderson, A., Brossard, D., Scheufele, D., Xenos, M., & Ladwig, P. (2014). The "Nasty Effect": Online Incivility and Risk Perceptions of Emerging Technologies, *Journal of Computer-Mediated Communication, 19*(3), 373–387. https://doi.org/10.1111/jcc4.12009

Anderson, A., Yeo, S. K., Brossard, D., Scheufele, D., & Xenos, M. (2018). Toxic Talk: How Online Incivility Can Undermine Perceptions of Media, *International Journal of Public Opinion Research 30*(1), 156–168. https://doi.org/10.1093/ijpor/edw022

Critcher, C. (2008). Making Waves: Historical Aspects of Public Debates about Children and Mass Media. In K. Drotner & S. Livingstone (Eds.), *The International Handbook of Children, Media and Culture* (pp. 91-104). Sage.

Kenski, K., Coe, K., & Rains, S. (2017). Perceptions of Uncivil Discourse Online: An Examination of Types and Predictors. *Communication Research*, 1-20.

Masullo Chen, G., Muddiman, A., Wilner, T., Pariser, E., & Stroud, N. J. (2019). We Should Not Get Rid of Incivility Online. *Social Media + Society, 5*(3). https://doi.org/10.1177/2056305119862641

Mutz, D. C. (2007). Effects of "In-Your-Face" Television Discourse on Perceptions of a Legitimate Opposition. *American Political Science Review, 101*(4), 621-635. https://10.1017/S000305540707044X

Papacharissi, Z. (2004). Democracy online: Civility, politeness, and the democratic potential of online political discussion groups. *New Media & Society 6*(2), 259–283. https://10.1177/1461444804041444

Park, R. E. (1984/1925). The natural history of newspaper. *The city*. R. E. Park e E. W. Burgess (Eds.). The University of Chicago Press.

Roché, S. (1996). *La Société Incivile – Qu'est ce que l'insécurité?* Éditions du Seuil.

Syvertsen, T. (2017). *Media Resistance: Protest, Dislike, Abstention*. Palgrave.

Syvertsen, T. (2020). *Digital detox: The Politics of Disconnection*. Emerald.

COMMENTS THAT HURT: INCIVILITY IN USER-GENERATED COMMENTS ABOUT MARGINALIZED GROUPS

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ABSTRACT

Latin America is currently going through a process of social transformation that directly affects how marginalized groups (such as LGBTQ+ and immigrants) are treated by hegemonic groups. These transformations have not ended prejudice against marginalized groups, especially in the digital public sphere. This study examines the representation of marginalized groups in user-generated comments posted to a Chilean news outlet. By analyzing 1,176 news articles and 4,225 comments, we explored whether news coverage of minority-related topics fosters deliberative or uncivil discussions in online contexts. Our findings indicate marginalized groups are the target of offensive speech at higher rates than other groups, and comments tend to portray minorities negatively and stereotypically. We also found a disconnect between topics the news media find worth covering and topics users find worth discussing. Consequently, news organizations should revise the topics they devote more coverage to if they want to connect with their readers' interests.

Keywords: Incivility ▪ offensive speech ▪ deliberation ▪ marginalized groups ▪ user-generated comments ▪ Latin America

1. INTRODUCTION

Constant transformations have shaped the history of Latin America in terms of social values and demographic profiles, the beginnings of which can be traced back to the Spanish conquest. Since the 16th century, significant European migratory waves settled on the continent, changing the social codes of those who originally inhabited the region.

Today, the continent continues to experience social transformations that challenge the conservative and mostly Catholic Latin American identity. Three issues related to minorities and marginalized groups are currently shaking the region: immigration, feminism, and the presence of lesbian/gay/transgender/bisexual/queer (LGTBQ) groups in the public and media agendas.

Social conditions in countries such as Venezuela or Haiti have caused human displacements to different areas of the continent, causing profound demographic changes in many places (Albor-Chadid et al., 2018). Countries with traditionally low racial diversity, such as Chile, nowadays have people from different cultures and origins (Canales, 2018). This "forced" interaction creates continual situations of discrimination, in which racial minorities are perceived negatively by the rest of the community (Cirano, Espinoza, & Jara, 2017).

Similarly, debates about issues related to gender and sexual minorities, such as gay marriage, LGBTQ+ parenting, and anti-discrimination laws (Corrales, 2015), have also emerged in the last few years. The feminist movement has gained strength in the region (Hernández, 2018), which, under the slogan #NiUnaMenos, denounces violence against women and demands the protection and defense of women's rights, such as legal abortion, equal pay, and improved labor conditions (Laudano, 2017). Despite the increased awareness towards recognizing their rights, both gender and sexual minorities continue to confront violent speech against them (Hiner, 2019).

The media take part in the way marginalized groups are portrayed. According to Etchegaray and Correa (2015), exposure to media discourse can shape how audiences perceive certain groups, such as immigrants. The stereotypes and stigmatization reinforced by media narratives transfer to and get reproduced in audience narratives (Hallgrimsdottir, Phillips, & Benoit, 2006). In this context, studying how people perceive minority-related issues becomes not only relevant but also imperative. The present study aims to identify the extent to which news coverage of marginalized groups fosters deliberative or negatively passionate discussions in online contexts. To that end, this study analyzed 1,176 news articles and 4,225 user-generated comments to observe incivility and deliberation traits in the public discussion of minority-related news.

Previous research has found that user-generated comments posted in response to news stories are a place for public deliberation. News comments foster the exchange of opinions between addressee and speaker (Springer, Engelmann, & Pfaffinger, 2015), provide a space where audiences discuss news content with each other and journalists (Graham & Wright, 2015), and allow users to hold discussions with people who do not necessarily share the same values and beliefs (Saldaña, 2020). While this positive, optimistic view of news comment sections has been challenged by previous research (Hughey & Daniels, 2013), this article explores how minority-related issues are discussed in the online public sphere, specifically in comment threads posted to a news organization's Facebook page.

This study takes place in Chile, a country with high rates of social media penetration (We Are Social, 2021) as well as high levels of online news consumption (Newman et al., 2021, 2022) that is currently experiencing the social transformations described above. Although most Latin American countries present different political, economic, and social conditions, Chile is a good proxy to study news coverage of marginalized groups and public talk in online news settings.

2. MEDIA PORTRAYAL OF MARGINALIZED GROUPS

The news media have become the arena where individuals dispute power to establish social representations and meanings (Hall, 1980, 1992). Hegemonic ideologies in a social structure are the result of how the social discourse is constructed and who has the power to control it (Hall, 1996). The media are said to be a powerful actor shaping the construction of social representations, where some groups are marginalized from the dominant discourse. That is the case of minorities and marginalized groups — especially the ones related to race and gender — whose image has been harmed by how the media usually portray them.

On the one side, minority-related issues tend to be ignored by journalistic practices. Problems related to marginalized groups and their needs are rarely covered, nor are minority voices quoted as information sources (Campbell, 1995). Such practices intensify the marginalization and misrepresentation of these communities in the news media (Campbell, LeDuff, & Brown, 2012). Researchers have coined the term "symbolic annihilation" (Thaker, Dutta, Nair, & Rao, 2019) to refer to the exclusion (intentional or not) of these groups from mainstream media, resulting in a lack of representation.

On the other side, when marginalized groups do become visible and covered in the news, their portrayal is burdened with stereotypes (Ramasubramanian, 2007). The media tend to portray them exaggeratedly, perpetuating the negative characteristics they are usually associated with (LeDuff, 2012). In the case of racial minorities, they are usually associated with crime and violence (e.g., Dixon, 2017; Farkas, Schou, & Neumayer, 2018; Robinson & Culver, 2019), illegal immigration (LeDuff & Cecala, 2012; Santana, 2015), and a paternalistic compassion (Poo, 2009). Gender-marginalized groups tend to be sexualized (Antunovic, 2019), and LGBTQ+ groups are associated with HIV/AIDS disease (Thaker et al., 2019) or represented as outcasts (Gross, 1991; Strand & Svensson, 2019). In all these cases, these groups are portrayed as "the others" in contrast to the white, straight Western culture (Liebler, 2010).

The invisibility and marginalization of these groups, together with misrepresentation and stereotypes, have a direct impact on the way audiences perceive these communities and the attitudes people develop toward them (Etchegaray & Correa, 2015). Research has shown that, in the case of comment sections in online newspapers, messages posted by news readers are influenced by media discourse (Harlow, 2012). As such, we expect a relationship between news coverage and user-generated comments. If news media have historically neglected marginalized groups, or made their problems imperceptible, news readers might not consider paying attention to or discussing news stories about marginalized groups. Following this line of thought, this study predicts:

H1: Stories about marginalized groups will receive fewer comments than stories about other topics.

Previous research has identified the presence of offensive speech in public conversations about minority groups in which they are addressed with uncivil comments (Santana, 2015). Uncivil speech is often associated with a disrespectful tone toward a subject, a topic, or another participant in a discussion (Coe, Kenski, & Rains, 2014). While the literature offers different definitions of what is considered civil or uncivil (Coe et al., 2014), there are two main lines of thought defining incivility. The first one approaches uncivil language as the violation of interpersonal norms directly related to impoliteness (e.g., Herbst, 2010; Mutz, 2015), while the second one distinguishes incivility from impoliteness, considering threats to democracy and to individuals' rights as uncivil (Papacharissi, 2004). This study relies particularly on Chen's definition of incivility (2017), which defines uncivil speech as a continuum with impoliteness on the softer end and hate speech and stereotypical language on the more extreme end (Chen, Muddiman, Wilner, Pariser, & Stroud, 2019).

Recent studies have shown that marginalized groups are directly targeted with incivility (Yacubov & Rossini, 2020), receiving hostility and intolerance from other users in online interactions (KhosraviNik & Esposito, 2018; Rossini, 2019). As a result, these messages end up reinforcing stereotypes and promoting acerbic discourses (Chen, Fadnis, & Whipple, 2020). At the same time, uncivil speech could be a tool for marginalized groups to speak up and get their points across (Chen et al., 2019), which might also increase the levels of incivility in online discussions. This evidence leads us to the following hypothesis:

H2: There will be more incivility in comments posted to stories about marginalized groups as compared to stories about other topics.

3. DELIBERATION AND INCIVILITY

Deliberation stands out as an essential concept for exercising democracy in social life. This ideal of deliberative democracy, envisioned by Habermas (1998) from a political perspective, relies on citizen exchanges for effective discussions when making decisions. Consequently, communicative actions are directly related with democracy. When studying democracy and mass media, many authors have adopted Habermas' conception of deliberation, sharing some key points. They conceive it as the democratic practice of informed discussions among citizens, in which they engage in attentive dialogue concerning public issues (e.g. Burkhalter, Gastil, & Kelshaw, 2002; Min, 2007). In essence, everyone can participate in the decision-making process instead of leaving this power in the hands of a few (Chen & Lu, 2017).

Even though deliberation finds its origins in the offline world, some of the exchanges on social media and news comment sections show deliberative traits, with active engagement from readers (Ndhlovu & Santos, 2021; Oz, Zheng, & Chen, 2018). At the same time, studies show that news comment sections might be especially harsh toward marginalized groups, as racist and misogynist attacks are likely to happen in

these spaces (Watson, Peng, & Lewis, 2019). Thus, user-generated comments could be a venue for the exercise of deliberation (Halpern & Gibbs, 2012) and the development of civic life (Manosevitch & Walker, 2009) in an imperfect digital version of Habermas' deliberative democracy. In this study, however, we are approaching deliberation from a more practical stance. According to Chen (2017), deliberative speech is related to openness to discuss challenging viewpoints, asking questions to better understand such viewpoints, and arguing based on factual information. As such, backing one's claims with evidence, and asking legitimate questions, would be measurable forms of deliberation in user-generated comments (Chen, 2017).

Deliberation is somehow linked to incivility — for a discussion to take place, opposing positions are required. And it is easy for one side to get carried away by its emotions and attack its counterpart (Chen, 2017). Therefore, incivility and deliberation can coexist in the same message. Under certain conditions, the presence of deliberation is more common than incivility (Chen, 2017). Yet, this outcome depends on the topic under discussion (Coe et al., 2014; Oz et al., 2018) and the cultural context where such discussion occurs. In the case of Chile, deliberative discussion seems to be very scarce (Saldaña & Rosenberg, 2020).

Marginalized groups could benefit from deliberation in public spaces by making their interests and perspectives more visible. Still, studies indicate minorities are often humiliated in these spaces, transgressing some of the basic principles of deliberation (Ottonelli, 2017). Considering these conflicting perspectives, we ask:

RQ1: Will comments posted to stories about marginalized groups present more deliberation than comments posted to stories about other topics?

Previous literature has identified predictors of incivility. The use of all capital letters and exclamation points — as typographic representations of the act of shouting — (Gervais, 2015; Sobieraj & Berry, 2011) is associated with higher levels of incivility. Similarly, anonymity in the delivery of a message usually increases incivility levels, as users do not face backlash or negative consequences for exerting uncivil speech. User gender is also related to incivility. Researchers have found that men tend to use more uncivil expressions in their comments than women (Chen, 2017; Proust & Saldaña, 2022). Therefore, we expect:

H3: There will be more incivility in comments posted by anonymous users and male users, and in comments containing words in all capital letters, regardless of the topic of the story.

We do not know if factors increasing incivility could negatively impact deliberation, i.e., if attributes like gender or anonymity could decrease the use of deliberative arguments. To explore a possible relationship, we ask:

RQ2: Do anonymity, gender, and using all capital letters affect the presence of deliberation in news comments, regardless of the topic of the story?

4. METHODS

This study conducts a content analysis of news articles and user-generated comments in a six-month time frame: October, November, and December 2018, and January, February, and March 2019. Data for this study come from news articles published by Radio Bío Bío, the most important radio news network in Chile, and the most trusted news outlet in the country (Newman et al., 2019, 2020, 2021, 2022). Despite many news organizations providing comment sections in their websites, we worked with user-generated comments posted to news stories published on Facebook. The latest reports on news consumption indicate audiences get their news through social media, especially in Latin American countries (Newman et al., 2019, 2020, 2021, 2022; We Are Social, 2021). As such, we worked with the Facebook page of Radio Bío Bío to retrieve both the news articles published daily and the comment threads posted to those articles.

4.1. Sample and coding: News articles

We generated a Python script to retrieve all news content and user-generated comments posted on Radio Bío Bío's Facebook page from October 1, 2018, to March 31, 2019, building a database of six months' worth of news content and comment threads. No significant political event (such as an election) nor social conflict (such as Chile's social uprising in October 2019) occurred in this six-month period, so we did not have to account for any unusual episode that could eventually influence the news content. We produced five constructed weeks based on sampling strategies developed by previous studies working with online news content (Hester & Dougall, 2007; Valenzuela, Piña, & Ramírez, 2017). The initial five-week sample contained more than 5,700 news articles and approximately 660,000 news comments. Once we discarded articles containing videos and infographics with no written story, op-eds, and duplicated stories, we ended up with a final sample of 2,994 news articles.

We trained three undergraduate students to code the articles manually. The training process used a pool of 500 stories (not contained in the sample analyzed in this study) to familiarize the students with the codebook and to calculate inter-coder reliability (ICR). Students coded for news topics according to a list of 40 categories (see Appendix 1). The news categories were mutually exclusive, and the codebook provided guidance on how to decide what the main news topic was when a story could have more than one topic. For instance, if the story covered a football player dating a model, the story would not be coded as "sports" but as "celebrities." If a story covered the first transgender student being accepted at a Catholic school, it would be coded as "LGBTQ+" and not as "education." Coders were prompted to look at the

main issue being the focus of the coverage to make their coding decisions. Using the ReCal3 software (Freelon, 2010), ICR levels reached 80% agreement and Krippendorff's alpha of .65.

4.2. Sample and coding: News comments

Once we completed coding of news articles, we randomly selected a subsample of stories to code comment threads posted to those stories. To ensure our sample included stories with different number of comments, we ranked the 2,994 articles in descending order of comments, and then used a skip interval of eight to create a sample of 370 articles. After removing pieces with less than five comments or more than 100 comments, the final sample of comments contained 11,767 comments posted to 341 news stories.

While most studies analyzing news comments randomly select individual comments (e.g., Chen et al., 2020), we wanted to capture the essence of the online discussion happening below a specific news story. That is why we did not sample comments but comment threads, although the unit of analysis is still the individual comment.

The same undergraduate students who coded the sample of articles were trained to code the sample of comments. The codebook included three attributes of incivility, two attributes of deliberation, and three attributes usually associated with the presence of uncivil speech: gender of the commenter, anonymity, and using all capital letters. Coding categories and ICR levels are described in detail in Table 1.

The present study reports results from analyzing news stories (N=1,176) and comments (N=4,225). As explained above, stories were coded for 40 categories of news topics. In this study, we used 11 topics to focus our analysis on four minority-related issues (feminism, LGBTQ+, immigration, and discrimination against people with disabilities) and seven non-minority topics that are usually featured as the main topics in the media agenda (politics, economy, education, health, culture & arts, science & technology, and sports). There were 4,225 comments posted to the news stories contained in these 11 topics, which comprise the comment sample of this study.

Table 1. News-comment codebook and inter-coder reliability.

Coding categories	Description	Agreement	Krippendorff's alpha
Gender	Gender was determined by looking at the username of the commenter, and coded as 1 for males, 2 for females, and 3 for indeterminate. This variable was further recoded as 1 for males, and 0 for other.	95%	.80
Anonymity	Anonymity was the absence of elements in the username (such as first and last name) that could reveal user identity. Using nicknames (e.g. Fran Fran, Mario A, or Superman45) was considered as being anonymous and was coded as 1. If not, as 0.	96%	.81

Coding categories	Description	Agreement	Krippendorff's alpha
All capital letters	We considered the use of all capital letters as an act of shouting on the internet. If all or some words in the comment were written in all caps, it was coded as 1. If not, as 0.	99%	.80
Profanity	A comment was profane when the user wrote profanities or used vulgar language in the comment, with the intention of offending someone. If such language was present, it was coded as 1. If not, 0.	92%	.77
Insulting language	This variable alludes to the use of any name-calling with pejorative intention (e.g. you are a jerk!). When insulting language was found in a comment, it was coded as 1. If not, as 0.	90%	.73
Stereotypes	Stereotypes are words or expressions negatively portraying a group of people (such as women, immigrants, racial or sexual minorities). If stereotypical language was used in the comment, it was coded as 1. If not, as 0.	85%	.70
Evidence	If the comment provided numeric or statistical evidence to support a fact, or if it included links to access additional information, it was coded as 1. If not, as 0.	92%	.75
Legitimate question	Any non-rhetorical question in the comment that invited to deliberate or further elaborate was coded as 1. If not, as 0.	93%	.72

4.3. Main variables

Drawing upon Chen's approach to uncivil and deliberative speech (2017), we measured incivility by coding for the presence of three attributes of uncivil speech: profanity, insults, and stereotypes (see Table 1). These three attributes were added to create an index of incivility ranging from 0 (no uncivil attributes) to 3 (three uncivil attributes). To make the analyses more parsimonious, we recoded this index into a dichotomous variable where comments with no incivility attributes were coded as "civil" (0) and comments with one or more incivility attributes were coded as "uncivil" (1).

We measured deliberation by coding for the presence of two attributes of deliberative conversation: evidence and legitimate questions (see Table 1). We added these two attributes to create an index of deliberation ranging from 0 (no deliberative traits) to 2 (two deliberative traits). To make the analyses more parsimonious, we recoded this index into a dichotomous variable where we coded comments with no deliberation traits as "non-deliberative" (0) and comments with one or more deliberation traits as "deliberative" (1).

News coverage of marginalized groups was created by using four categories of the

news topic variable described in Appendix 1: feminism, LGBTQ+, immigration, and discrimination against people with disabilities. These topics refer to issues currently happening to marginalized groups in several Latin American countries: marginalized racial/ethnic groups facing violence, women and LGBTQ+ people being discriminated against, immigrants receiving hostility for challenging the value system in the hosting country, and people with special needs facing discrimination in several contexts. We considered news stories about these groups as minority-related topics.

News coverage of mainstream issues was created by using seven categories of the news topic variable described in Appendix 1: politics, economy, education, health, culture & arts, science & technology, and sports. These categories represent issues that are continuously covered by the news media. As such, we considered stories related to these issues as mainstream topics.

Comment attributes such as gender, anonymity, and all capital letters were previously described in Table 1 and refer to comment features that are usually associated with the presence of incivility (Chen, 2017).

4.4. Data analysis

H1 was tested by comparing the number of comments in minority-related topics versus mainstream topics. A T-test for independent samples was performed to establish whether differences between both groups were significant.

H2 was tested by comparing the proportion of uncivil comments in minority-related topics versus mainstream topics. A Chi-square test was calculated to identify significant associations between topics and incivility.

RQ1 was answered by comparing the proportion of deliberative comments in minority-related topics versus mainstream topics. A Chi-square test was calculated to identify significant associations between topics and deliberation.

Finally, H3 and RQ2 were tested/answered by running logistic regression models with comment attributes and news topics entered into the equation as predictors.

5. RESULTS

5.1. News coverage versus readers' discussion

As explained in the methods section, we coded a sample of articles to identify news topics in five constructed weeks of news content. In this study, we present the results of the content analysis of 1,176 articles categorized in eleven news topics: politics, health, economy, education, science & technology, sports, culture & arts, immigration, feminism, LGBTQ+, and discrimination against people with disabilities.

According to Figure 1, sports-related stories comprised almost half of our sample (48%), while fewer than 8% were related to one of the four minority-related topics

we coded for. These numbers reveal that issues like feminism, immigration, LGTBQ+, and discrimination receive minimal daily news coverage.

Yet, highly covered news topics are not necessarily the topics people discuss the most. While only 2% of the articles were about the economy, this topic was the focus of most of the news comments. As shown in Figure 1, economy registered more than 400 comments per story (on average), followed by LGBTQ+ (384 comments) and feminism (315). Sports received an average of 31 comments per story. As such, readers might consider it worthy to discuss topics the media do not always place at the top of the agenda.

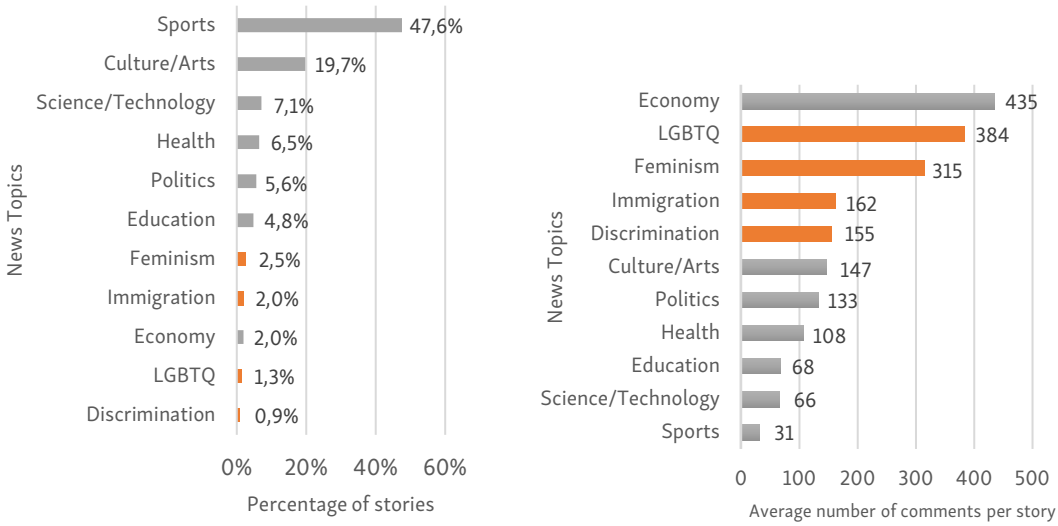

Figure 1. Percentage of stories per topic versus the average number of comments per story in each topic

H1 predicted that stories about marginalized groups would receive fewer comments than stories about other topics. Results in Figure 1 suggest the opposite, as the four minority-related topics observed in this study ranked in the top five topics with more comments per story. If we compare minority-related topics with mainstream topics, stories about marginalized groups received 260 comments on average (M=260.5, SD=424.4), while stories about other topics received around 80 comments on average (M=80.2, SD=231.3). A T-test for independent samples shows these differences are significant ($t_{(80.3)}$=3.71, p<.001)[1]. As opposed to what H1 suggested, stories about marginalized groups received significantly more comments than stories about other topics. Thus, H1 is not supported.

1 As the number of comments was not normally distributed (skewness=6.6, kurtosis=58), we log transformed the variable (skewness=.25, kurtosis=-.64) and ran the t-test again. Results held significant after the log transformation ($t_{(1,174)}$=7.22, p<.001), confirming our initial findings.

5.2. Presence of incivility attributes

H2 suggested that comments on stories about marginalized groups would present more incivility than comments on stories about other topics. According to the analysis, uncivil comments made up 25% of the sample. In other words, one out of every four comments in the sample had at least one attribute of incivility. Results in Figure 2 show the four minority-related topics presented incivility levels above the sample average, while most of the mainstream topics scored below the mean. Forty percent of the comments on stories about immigration were uncivil, while health (10%) and technology (12%) had the fewest uncivil comments. When grouping topics as minority versus mainstream, we observed that stories about marginalized groups received a higher proportion of uncivil comments as compared to stories about mainstream issues (see Figure 2). A Chi-square test indicated a significant association between topics and incivility (χ^2=107.5, p<.001), with minority topics triggering significantly more uncivil conversations. Consequently, H2 is supported.

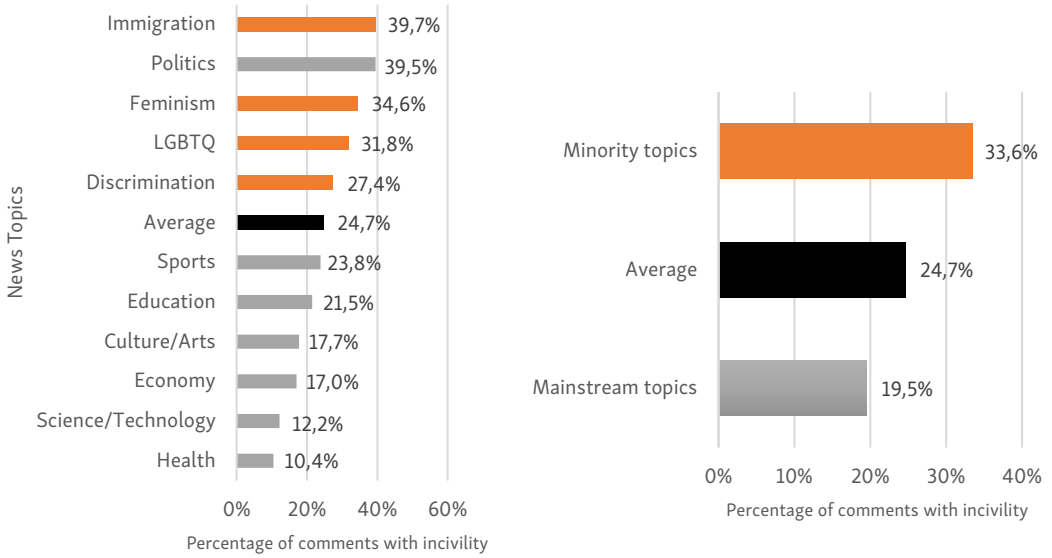

Figure 2. Percentage of uncivil comments per topic (single and aggregated)

5.3. Presence of deliberative traits

RQ1 inquired about deliberation in news comments. Results illustrated in Figure 3 suggest Chilean commenters do not deliberate much — less than 4% of the comment sample presented attributes of deliberation. Some topics showed higher levels of deliberative conversation, such as economy (8%) and education (5%), but topics like politics (1%) and sports (2%) showed almost no deliberation traits. Among minority-related topics, stories about discrimination and LGBTQ+ scored above the

mean, while stories about immigration and feminism scored below the mean. When grouping topics as minority-related versus mainstream, we see that the proportion of deliberative comments is similar in both categories (see Figure 3), which is confirmed by a non-significant Chi-square test (χ^2=.09, p =.75) indicating no association between topics and deliberation. In summary, comments on stories about marginalized groups do not present more deliberation than comments on stories about other topics.

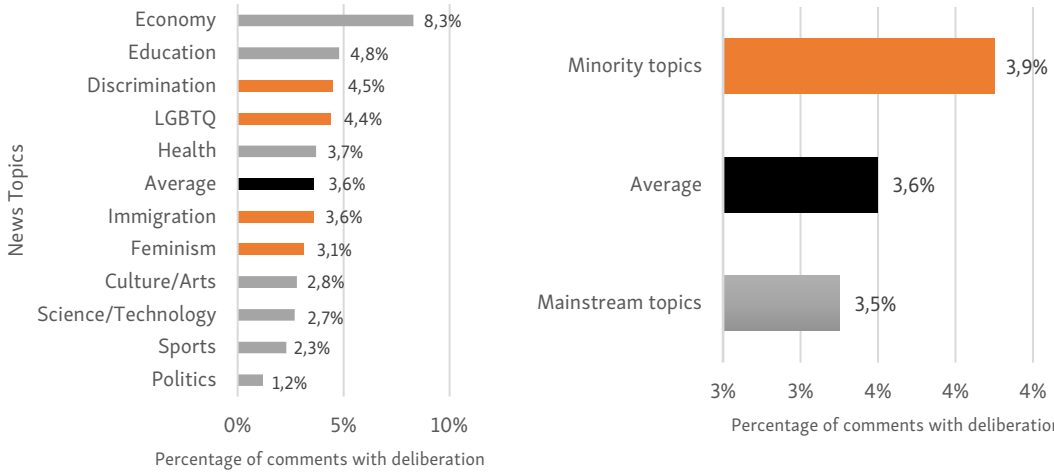

Figure 3. Percentage of deliberative comments per topic (single and aggregated)

5.4. Factors affecting incivility and deliberation

Finally, H3 suggested that comments posted by anonymous users, male users, and comments containing words in all caps, are associated with higher levels of incivility, regardless of the topic of the story. And RQ2 inquired whether these comment attributes (gender, anonymity, and all capital letters) are associated with deliberation. Results from a logistic regression indicate that comments containing words in capital letters and comments posted by male commenters have higher odds of presenting attributes of incivility. Anonymity, however, had no significant effect on incivility. Consequently, H3 is partially supported. In terms of deliberative speech, comments posted by anonymous users had higher odds of presenting attributes of deliberation, while comments in all caps reduced the odds of deliberative conversation. Results from the logistic regression models are presented in Table 2.

Table 2. Logistic regression analyses predicting incivility and deliberation in news comments.

	Incivility			**Deliberation**		
	OR	95% CI		OR	95% CI	
		Lower	*Upper*		*Lower*	*Upper*
Anonymity	1.07	.85	1.35	1.51**	1.12	2.04
All capital letters	1.40*	1.03	1.90	.45**	.24	.81
Gender (1=male)	1.22***	1.10	1.34	.94	.82	1.09
Nagelkerke R-square	.01			.01		
Chi-square	8.21*			1.66		
Df	2			2		

Note: N= 4,225. Cell entries correspond to Exp(B) coefficients. * p < .05, ** p < .01, *** p < .001.

When we entered news topics in the regression models, findings observed in Table 2 hold significant. Yet, certain topics do make a difference in terms of both incivility and deliberation. Taking sports as the baseline category, results suggest that issues like feminism, immigration, and LGBTQ+ have higher odds of receiving comments with uncivil traits. Among mainstream issues, politics also present higher odds of uncivil comments. In contrast, news topics like science & technology, economy, and health have lower odds of generating uncivil conversations.

Regarding deliberation, topics like education, economy, and discrimination increase the odds of deliberative arguments on news comment sections, while culture & arts decrease such odds. Results from the logistic regression models are presented in Table 3.

Table 3. Logistic regression analyses predicting incivility and deliberation in news comments.

	Incivility			Deliberation		
	OR	95% CI		OR	95% CI	
		Lower	*Upper*		*Lower*	*Upper*
Anonymity	1.02	.80	1.30	1.563*	1.00	2.66
All capital letters	1.38*	1.00	1.89	.14*	.02	.98
Gender (1=male)	1.19***	1.08	1.33	.93	.74	1.
Science & Technology (dummy)	.45***	.30	.67	1.18	.50	2.79
Education (dummy)	.94	.69	1.29	2.10*	1.07	4.12
Feminism (dummy)	1.82***	1.39	2.38	1.33	.63	2.79
Immigration (dummy)	2.16***	1.69	2.77	1.48	.76	2.89
LGBTQ+ (dummy)	1.53***	1.18	1.98	1.85	.98	3.49
Politics (dummy)	2.05**	1.28	3.29	.53	.07	3.96
Health (dummy)	.41***	.27	.62	1.51	.72	3.20
Economy (dummy)	.68*	.48	.97	3.73***	2.04	6.82
Discrimination (dummy)	1.28	.97	1.69	1.98*	1.02	3.84
Culture/Arts (dummy)	1.05	.71	1.55	.32***	.16	.62

	Incivility			Deliberation		
	OR	95% CI		OR	95% CI	
		Lower	*Upper*		*Lower*	*Upper*
Nagelkerke R-square	.07			.03		
Chi-square	5.33*			15.59*		
Df	7			8		

Note: N= 4,225. Cell entries correspond to Exp(B) coefficients. Sports as baseline category for news topic.* p < .05, ** p < .01, *** p < .001.

6. DISCUSSION

This study explored how news stories about marginalized groups are discussed in the public sphere of user-generated comment threads. By observing the user discussion on stories from a popular, highly trusted news outlet in Chile, this study was able to identify how news commenters refer to minority-related issues, and the extent to which the news media provide visibility to those issues in times of profound social transformations occurring in Latin America.

As previous research has shown, minority-related issues are rarely covered by the news media (Campbell, 1995) and when they do become visible, they are portrayed in negative, stereotypical ways (Ramasubramanian, 2007). While this study did not analyze the attributes used by the news media to refer to marginalized groups, we did observe the coverage in terms of quantity, and found that stories about feminism, LGBTQ+, immigration, and discrimination against people with disabilities make up less than 8% of the stories in our sample (N=1,176). These numbers indicate that, despite the growing relevance of issues like immigration or gender in Chile and Latin America, even highly trusted news organizations like Radio Bío Bío devote minimal coverage to such issues. In contrast, stories about sports comprised almost half of the sample.

While the high number of sports-related stories could reinforce the idea of sports being one of the most popular things in Latin America —in the words of Bocketti, "it is essential to understand sports if we are to understand the region," (2017, para. 1)— this study found that sports do not necessarily trigger lengthy comment threads. In fact, in our 11-topic list, sports ranked last in terms of number of comments, with an average of 31 comments per story. In comparison, the minority-related issues received hundreds of comments per story. These results suggest that news readers are likely to engage in conversations about topics they care about, no matter how prominent those topics are in the news media. These findings also suggest that news organizations should revise the topics they devote more coverage to, if they are to increase user engagement and, most importantly, if they want to connect with their readers' interests.

Yet, our findings indicate quantity does not translate into quality. Although we saw significantly more discussion in stories about minority-related issues, such

discussion was riddled with hostility and offensive speech. While the average amount of incivility was 25%, this number rose to 34% in minority-related stories. In other words, one out of three comments were uncivil, considerably higher than the one-out-of-five rate of uncivil comments found in previous studies (Coe et al., 2014). This finding is worrisome to say the least, and it shows that the negative portrayal of marginalized groups is present in conversations that no longer happen behind closed doors. Interestingly enough, we expected anonymous users to be more uncivil (Chen, 2017), yet, we found anonymity did not make a difference, as users commenting with their actual names were as uncivil as those using nicknames or fantasy names. Apparently, users are not shy about openly using offensive speech when commenting on the news. Just to provide an example, one of the most uncivil comments we found in the sample (containing vulgarity, insults, and stereotypical language at the same time) was a comment describing immigrants as "leprous, drug traffickers, prostitutes, and criminals – people who compete for miserable jobs and rob us on the streets." This type of comment resembles findings from research about media portrayals of racial minorities, who are usually associated with crime and violence (e.g. Dixon, 2017; Farkas et al., 2018; Robinson & Culver, 2019), as well as studies showing consonance between media narratives and user narratives in comments sections (Harlow, 2012). While we cannot claim the news discussion was affected by the media coverage of minorities (as this study did not focus on news content but only news comments), we do observe that marginalized groups, historically misrepresented by the news media, are also negatively portrayed by news audiences.

That is not to say that all comments in our sample were meant to attack minority populations. In stories about discrimination, users were triggered by reports of people with disabilities being bullied or discriminated against, as this type of story usually triggers a great deal of public sympathy and support for disabled people (Briant, Watson, & Philo, 2013). In these cases, users posted aggressive comments to express anger and discomfort with the content of the stories. But while comments posted to discrimination-related stories followed a different pattern, the main trend we found in this study was that users were uncivil and hostile toward "the otherness" (Liebler, 2010) expressed in stories about immigrants, feminists, and LGBTQ+ groups.

The lack of deliberative conversation follows a trend seen in previous studies about user-generated comments in Chile (Proust & Saldaña, 2022; Saldaña & Rosenberg, 2020). However, we found a couple of unexpected results. First, anonymity increased the odds of comments having deliberative traits. While we do not have a definitive explanation for this finding, future studies could look into spirals of silence that lead users in highly uncivil conversations to shut themselves down and voice deliberative opinions only when their identities are concealed. Second, we expected deliberation to vary depending on story topic. Yet, the story topic made very little difference, unlike what Chen (2017) found in her study. Consequently, more research is needed to understand why Chilean news readers are more likely to engage in uncivil interactions instead of fostering a healthy environment to discuss public issues.

Chile, together with other Latin American countries, is going through a profound process of social transformation that directly affects how marginalized groups are treated by hegemonic or elite groups. Moreover, marginalized groups have been appropriating the digital space to defend their causes and gain more visibility (García-Ruano, Pacheco, & Suazo, 2013). Therefore, news media should reflect on whether to keep the status quo or to take an active role in avoiding the reinforcement of stereotypes about marginalized groups and protecting them from violent messages.

Research has shown that incivility in news comment sections directly affects how readers perceive the content of a news story. Uncivil comments may have a negative effect on how audiences perceive the quality of an article (Prochazka, Weber, & Schweige, 2018), and can make people evaluate the facts presented in the news in a negative way (Anderson, Brossard, Scheufele, Xenos, & Ladwig, 2014). This research, together with the findings of the present study, highlight the relevance of studying comment sections of news sites. By observing conversations about minority versus mainstream issues, this study sheds light on relevant elements to consider when studying incivility and news coverage of marginalized populations.

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REFERENCES

Albor-Chadid, L. I., Cotinguiba, P., Lima, M., Fernández Mattos, D. C., Castro Cotinguiba, G., Vega Do Lugar, S. J. & Almanza Iglesias, M. (2018). *Reflexiones sobre las migraciones en América Latina*. Barranquilla, Colombia: Ediciones Universidad Simón Bolívar. doi:10.1080/13691180500519548

Anderson, A. A., Brossard, D., Scheufele, D. A., Xenos, M. A., & Ladwig, P. (2014). The "nasty effect:" Online incivility and risk perceptions of emerging technologies. *Journal of Computer-Mediated Communication, 19*(3), 373-387. doi:10.1111/jcc4.12009

Antunovic, D. (2019). "We wouldn't say it to their faces": online harassment, women sports journalists, and feminism. *Feminist Media Studies, 19*(3), 428-442. doi:10.1080/14680777.2018.1446454

Bocketti, G. (2017). Sports Culture and the Varieties of Latin American Identity. *Latin American Research Review, 52*(1), 157-163. doi:10.25222/larr.93

Briant, E., Watson, N., & Philo, G. (2013). Reporting disability in the age of austerity: the changing face of media representation of disability and disabled people in the United Kingdom and the creation of new 'folk devils'. *Disability & Society, 28*(6), 874-889. doi:10.1080/09687599.2013.813837

Burkhalter, S., Gastil, J., & Kelshaw, T. (2002). A conceptual definition and theoretical model of public deliberation in small face—to—face groups. *Communication Theory, 12*(4), 398-422. doi:10.1080/19331681.2015.1100224

Campbell, C. (1995). *Race, myth and the news*. Thousand Oaks, USA: Sage Publications.

Campbell, C., LeDuff, K. & Brown, R. (2012). Yes We Did? Race, Myth and the News Revisited. In C. Campbell, K. LeDuff, C.D. Jenkins, & R.A. Brown. (eds), *Race and news: Critical perspectives* (pp. 3-21). New York, USA: Routledge.

Canales, A. (2018). Nueva era de las migraciones en Chile. De la diferenciación migratoria a la desigualdad social. In R. Baeninger et al (organizers), *Migrações Sul-Sul. Campinas*, SP: Núcleo de Estudos de População "Elza Berquó" – Nepo/Unicamp (pp. 37-53). Retrieved from https://www.nepo.unicamp.br/publicacoes/livros/leimig/lei_mig.pdf

Chen, G. (2017). *Online Incivility and Public Debate*. Nasty talk. Austin, USA: Palgrave Macmillan.

Chen, G., & Lu, S. (2017). Online political discourse: Exploring differences in effects of civil and uncivil disagreement in news website comments. *Journal of Broadcasting & Electronic Media, 61*(1), 108-125. doi:10.1080/08838151.2016.1273922

Chen, G., Fadnis, D., & Whipple, K. (2020). Can We Talk About Race? Exploring Online Comments about Race-Related Shootings. *Howard Journal of Communications, 31*(1), 35-49. 21 doi:10.1080/10646175.2019.1590256

Chen, G., Muddiman, A., Wilner, T., Pariser, E., Stroud, N.J. (2019). We Should Not Get Rid of Incivility Online. *Social Media + Society*, April 2019. doi:10.1177/2056305119862641

Cirano, R., Espinoza, G. & Jara, F. (2017). Determinantes sociodemográficos de la percepción hacia la inmigración en el Chile de 2017. *Instituto de Investigación en Ciencias Sociales, Universidad Diego Portales*. Retrieved from https://icso.udp.cl/cms/wp-content/uploads/2017/01/ICSO_DT33_Cirano_Espinoza_Jara-.pdf

Coe, K., Kenski, K., & Rains, S. A. (2014). Online and uncivil? Patterns and determinants of incivility in newspaper website comments. *Journal of Communication, 64*(4), 658-679. doi:10.1111/jcom.12104

Corrales, J. (2015). The politics of LGBT rights in Latin America and the Caribbean: Research agendas. *Revista Europea de Estudios Latinoamericanos y del Caribe*, (100), 53-62. doi:10.18352/erlacs.10126

Dixon, T. L. (2017). Good guys are still always in white? Positive change and continued misrepresentation of race and crime on local television news. *Communication Research, 44*(6), 775-792. doi:10.1177/0093650215579223

Etchegaray, N., & Correa, T. (2015). Media consumption and immigration: Factors related to the perception of stigmatization among immigrants. *International Journal of Communication, 9*(2015), 3601–3620. Retrieved from https://ijoc.org/index.php/ijoc/article/view/3997

Farkas, J., Schou, J., & Neumayer, C. (2018). Cloaked Facebook pages: Exploring fake Islamist propaganda in social media. *New Media & Society, 20*(5), 1850-1867. doi:10.1177/1461444817707759

Freelon, D. (2010). ReCal: Intercoder reliability calculation as a web service. *International Journal of Internet Science, 5*(1), 20–33. Retrieved from https://www.ijis.net/ijis5_1/ijis5_1_freelon_pre.html

Garcia-Ruano, K. J., Pacheco, A., & Suazo, D. (2013). The use of digital media for social mobilization in marginalized communities: The case of a Mayan socioenvironmental movement in Guatemala. *International Journal of*

Communication, 7(1), 1878-1891.
Retrieved from https://ijoc.org/index.php/ijoc/article/viewFile/2181/976
Gervais, B. T. (2015). Incivility online: Affective and behavioral reactions to uncivil political posts in a web-based experiment. *Journal of Information Technology & Politics, 12*(2), 167-185. doi:10.1080/19331681.2014.997416
Graham, T., & Wright, S. (2015). A tale of two stories from "Below the Line" comment fields at the Guardian. *The International Journal of Press/Politics, 20*(3), 317-338. doi:10.1177/1940161215581926
Gross, L. (1991). Out of the mainstream: sexual marginalized groups and the mass media. *Journal in Homosexuality, 21*(1), 19-46. doi:10.1300/j082v21n01_04
Habermas, J. (1998). Between facts and norms: An author's reflections. *Denver Law Review, 76*(4), 937-942. Retrieved from https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=1879&context=dlr
Hall, S. (1980). Encoding/decoding. In S. Hall, D. Hobson, A. Lowe, & P. Willis (eds.), *Culture, media, language* (pp. 128-138). London, UK: Hutchinson.
Hall, S. (1992). Race, Culture, and Communications: Looking Backward and Forward at Cultural Studies. *Rethinking Marxism, 5*(1), 10-18. doi:10.1080/08935699208657998
Hall, S. (1996). Racist Ideologies and the Media. In P. Marris & S. Thornham (eds.) *Media Studies: a reader* (pp. 271-283). Edinburg, UK: Edinburgh University Press.
Hallgrimsdottir, H. K., Phillips, R., & Benoit, C. (2006). Fallen women and rescued girls: Social stigma and media narratives of the sex industry in Victoria, BC, from 1980 to 2005. *Canadian Review of Sociology/Revue canadienne de sociologie, 43*(3), 265-280. doi:10.1111/j.1755-618X.2006.tb02224.x
Halpern, D. & Gibbs, J. (2013). Social media as a catalyst for online deliberation? Exploring the affordances of Facebook and YouTube for political expression. *Computers in Human Behavior, 29*(3), 1159-1168. doi:10.1016/j.chb.2012.10.008
Harlow, S. (2012). Social media and social movements: Facebook and an online Guatemalan justice movement that moved offline. *New Media & Society, 14*(1), 225–43. doi:10.1177/1461444811410408
Herbst, S. (2010). *Rude Democracy: Civility and Incivility in American Politics*. Philadelphia: Temple University Press.
Hernández, D. (2018). Los movimientos sociales en América Latina y la lucha por el poder desde la mirada de una feminista rural e indígena. *Revista venezolana de estudios de la mujer, 23*(51), 90-96. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=7137641
Hester, J. B., & Dougall, E. (2007). The efficiency of constructed week sampling for content analysis of online news. *Journalism & Mass Communication Quarterly, 84*(1), 811–824. doi:10.1177/107769900708400410
Hiner, H. (2019). Tejiendo Resistencias: violencia contra mujeres y sujetos LGBTQIA+ en la Historia Reciente de Chile. *Nomadías*, (27), 51-74. doi:10.5354/no.v0i27.54361

Hughey, M. W. & Daniels, J. (2013). Racist comments at online news sites: a methodological dilemma for discourse analysis. *Media Culture and Society, 35*(3), 332–347. doi:10.1177/0163443712472089

KhosraviNik, M. & Esposito, E. (2018). Online hate, digital discourse and critique: Exploring digitally-mediated discursive practices of gender-based hostility. *Lodz Papers in Pragmatics, 14*(1), 45-68. doi:10.1515/lpp-2018-0003

Laudano, C. (2017, July). *Movilizaciones# NiUnaMenos y# VivasNosQueremos en Argentina. Entre el activismo digital y# ElFeminismoLoHizo*. Paper presented at the 11 Seminário Internacional Fazendo Gênero y 13 Women's Worlds Congress. Retrieved from http://www.wwc2017.eventos.dype.com.br/resources/anais/1503871106_ARQUIVO_Laudano_Texto_completo_MM_FG.pdf

LeDuff, K. (2012). National News Coverage of Race in the Era of Obama. In C. Campbell, K. LeDuff, C.D. Jenkins, & R.A. Brown. (eds). *Race and news: Critical perspectives* (pp. 43-63). New York, USA: Routledge.

LeDuff, K. & Cecala, R. (2012). From the Water Cooler to the World Wide Web. In C. Campbell, K. LeDuff, C.D. Jenkins, & R.A. Brown. (eds). *Race and news: Critical perspectives* (pp. 88-110). New York, USA: Routledge.

Liebler, C. (2010). Me(di)a Culpa? The "Missing White Woman Syndrome" and Media Self-Critique. *Communication, Culture & Critique, 3*(2010) 549–565. doi:10.1111/j.1753-9137.2010.01085.x

Manosevitch, E. & Walker, D. (2009). *Reader comments to online opinion journalism: A space of public deliberation*. Paper presented at the International Symposium on Online Journalism, Austin TX. Retrieved from https://isoj.org/wp-content/uploads/2018/01/ManosevitchWalker09.pdf

Min, S. J. (2007). Online vs. face-to-face deliberation: Effects on civic engagement. *Journal of Computer-Mediated Communication, 12*(4), 1369-1387. doi:10.1111/j.1083-6101.2007.00377.x

Mutz, D. (2015). What is "In your face" politics? In D. Mutz (ed.) *In-Your-Face Politics: The Consequences of Uncivil Media* (pp. 1–16). Princeton, USA: Princeton University Press.

Ndhlovu, M. P., & Santos, P. (2021). Political corruption in Zimbabwe: News media, audiences and deliberative democracy. *Crime, Media, Culture, 18*(3), 393–411. doi:10.1177/17416590211022416

Newman, N., Fletcher, R., Kalogeropoulos, A., & Nielsen, R.K. (2019). Reuters Institute Digital News Report 2019. *Reuters Institute for the Study of Journalism*. Retrieved from https://www.digitalnewsreport.org/survey/2019

Newman, N., Fletcher, R., Schulz, A., Andı, S., & Nielsen, R.K. (2020). Reuters Institute Digital News Report 2020. *Reuters Institute for the Study of Journalism*. Retrieved from https://www.digitalnewsreport.org/survey/2020/

Newman, N., Fletcher, R., Schulz, A., Andı, S., Robertson, C.T., & Nielsen, R.K. (2021). Reuters Institute Digital News Report 2021. *Reuters Institute for the*

Study of Journalism. Retrieved from https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2021

Newman, N., Fletcher, R., Robertson, C.T., Eddy, K. & Nielsen, R.K. (2022). Reuters Institute Digital News Report 2022. *Reuters Institute for the Study of Journalism*. Retrieved from https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2022

Ottonelli, V. (2017). Democratic deliberation, respect and personal storytelling. *Critical Review of International Social and Political Philosophy, 20*(5), 601-618. doi:10.1080/13698230.2017.1328091

Oz, M., Zheng, P. & Chen, G. M. (2018). Twitter versus Facebook: Comparing incivility, impoliteness, and deliberative attributes. *New Media & Society, 20*(9), 3400-3419. doi:10.1177/1461444817749516

Papacharissi, Z. (2004). Democracy online: Civility, politeness, and the democratic potential of online political discussion groups. *New Media & Society, 6*(2), 259-283. doi:10.1177/1461444804041444

Poo, X. (2009). Imaginarios sobre inmigración peruana en la prensa escrita chilena: una mirada a la instalación de la agenda de la diferencia. *Revista Faro, 5*(9), 1-9. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=3095122

Prochazka, F., Weber, P., & Schweiger, W. (2018). Effects of civility and reasoning in user comments on perceived journalistic quality. *Journalism Studies, 19*(1), 62-78. doi:10.1080/1461670x.2016.1161497

Proust, V. & Saldaña, M. (2002). "What a nasty girl!" Incivility and gendered symbolic violence in news discussions. Feminist Media Studies. OnlineFirst. DOI: 10.1080/14680777.2022.2142640

Ramasubramanian, S. (2007). Media-Based Strategies to Reduce Racial Stereotypes Activated by News Stories. *Journalism & Mass Communication Quarterly, 84*(2), 249-264. doi:10.1177/107769900708400204

Robinson, S., & Culver, K. B. (2019). When White reporters cover race: News media, objectivity and community (dis) trust. *Journalism, 20*(3), 375-391. doi:10.1177/1464884916663599

Rossini, P. (2019). Toxic for whom? Examining the targets of uncivil and intolerant discourse in online political talk. In P. Moy & D. Matheson (eds). *Voices: Exploring the Shifting Contours of Communication* (pp. 221-242). New York, USA: Peter Lang.

Saldaña, M. & Rosenberg, A. (2020). I Don't Want You to Be My President! Incivility and Media Bias During the Presidential Election in Chile. *Social Media + Society*, October 2020. doi:10.1177/2056305120969891

Saldaña, M. (2020). Commenting on Disaster: News Comments as a Representation of the Public's Voice. En X., Orchard, S. Garcia Santamaria, J. Brambila, & J. Lugo-Ocando (eds). *Media and Governance in Latin America: towards a plurality of voices,* (pp. 161-181). New York: Peter Lang.

Santana, A. (2015). Incivility Dominates Online Comments on Immigration. *Newspaper Research Journal, 36*(1), 92-107. doi:10.1177/0739532915580317

Sobieraj, S., & Berry, J. M. (2011). From incivility to outrage: Political discourse in blogs, talk radio, and cable news. *Political Communication, 28*(1), 19-41. doi:10.1080/10584609.2010.542360

Springer, N., Engelmann, I., & Pfaffinger, C. (2015). User comments: Motives and inhibitors to write and read. *Information, Communication & Society, 18*(7), 798-815. doi:10.1080/1369118x.2014.997268

Strand, C., & Svensson, J. (2019). "Fake News" on Sexual Marginalized groups is "Old News": A Study of Digital Platforms as Spaces for Challenging Inaccurate Reporting on Ugandan Sexual Marginalized groups. *African Journalism Studies, 31*(2), 211-236. doi:10.1080/23743670.2019.1665565

Thaker, J., Dutta, M. J., Nair, V., & Rao, V. P. (2019). "Media portrayal stigma among gender and sexual marginalized groups". In T. Tufte (Ed.) *Communicating for Social Change* (pp. 383-407). Cambridge, UK: Polity Press.

Valenzuela, S., Piña, M. & Ramírez, J. (2017). Behavioral Effects of Framing on Social Media Users: How Conflict, Economic, Human Interest, and Morality Frames Drive News Sharing. *Journal of Communication, 67*(1), 803–826. doi:10.1007/978-981-13-2005-7_18

Watson, B. R., Peng, Z., & Lewis, S. (2019). Who will intervene to save news comments? Deviance and social control in communities of news commenters. *New Media & Society, 21*(8), 1840–1858. doi:10.1177/1461444819828328

We Are Social (2021). Global social media research summary 2021. *Smart Insights*. Retrieved from https://wearesocial.com/digital-2021

Yacubov, H., & Rossini, P. (2020). Trends in incivility and intolerance: An analysis of political Facebook comments during the 2016 election. *iConference 2020 Proceedings*. Retrieved from http://hdl.handle.net/2142/106589

Appendix 1.

	News topic – coding categories
1	Corruption
2	Crime
3	Human rights
4	Education
5	Poverty
6	Health
7	Transportation systems
8	Housing
9	Mapuche conflict
10	Religion
11	Politics (political campaigns, candidates, and political parties)

12	Weather and natural disasters
13	Accidents and tragedies (e.g., car accidents, fires)
14	Death and obituaries
15	Sports
16	Price increases and inflation
17	Labor and wages
18	Economy
19	National industries (agriculture, mining, forest)
20	Economy (other)
21	Environment
22	Science and technology
23	Tourism
24	Feminism
25	Abortion
26	LGBTQ+
27	Immigration
28	Venezuela
29	Israel – Palestine conflict
30	International relations
31	Lifestyle (maternity, beauty, romantic relationships)
32	Animals
33	Culture & arts
34	Celebrities
35	TV industry
36	Curiosity (virals, freak videos, humor)
37	Miscellaneous
38	Discrimination
39	Church sexual abuses
40	Energy (supply and costs)

FACEBOOK AS A PUBLIC ARENA FOR WOMEN: INFRINGING ON DEMOCRATIC IDEALS AND A CAUSE OF WORRY

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ABSTRACT

Facebook allows users to engage in public discourse. However, debates on social network sites are criticised for damaging democracy by adding to polarisation, limiting perspectives, and promoting a derogatory tone driven by emotion and personal conviction rather than facts. Research has thus far mainly focused on visible participation on Facebook, while the experience of this public space remains under-theorised. This study provides insights into women's user experience of Facebook as an arena for public discourse by conducting qualitative interviews with 30 female users of Facebook (aged 19-74) in Norway. The findings revealed interpretive repertoires based on deliberative ideals and negativity toward activities that do not adhere to such ideals. However, the results also indicated that worry was a key factor in negotiating these ideals and sometimes unintentionally replacing them with behaviours that may be harmful to public discussion.

Keywords: social network sites ▪ public discourse ▪ participation ▪ non-participation ▪ women ▪ democratic ideals ▪ Facebook

1. INTRODUCTION

Social network sites (SNS) and Facebook are often discussed and referred to as public arenas in popular discourse by politicians and the news media. The research literature also frequently theorises them as such. While SNS have structures that allow users the same access and possibilities to take part, which might provide egalitarian arenas for public discourse, most researchers no longer believe they will revolutionise it (Neuman et al., 2011; Papacharissi, 2002; Rojas & Puig-i-Abril, 2009; Schäfer, 2015; Van Dijck, 2012). However, the general user experience of such spaces as potential public arenas is thus far under-theorised.

In their definition of public, Coleman and Ross (2010) make the distinction between visible as opposed to hidden. Most users of Facebook are not visibly active

in public discourse (Kushner, 2016; Malinen, 2015; Sun, Rau, & Ma, 2014). Visibility in this setting refers to activities such as posting or taking part in public discourse that others can observe and not hidden activities such as paying attention or discussing public issues in private chats. There is reason to believe that gender-based discrimination and privilege influence public participation on Facebook and that women's activity is flying under the radar. Research suggests that on SNS, women participate more in private acts of political participation (Gil de Zuniga et al., 2014). Additionally, they post fewer political statuses (Miller et al., 2015, 384-387) and strategically choose to engage in political behaviours that are "less visible or less-likely-to-offend" (Bode, 2017).

This study departs from everyday experiences of Facebook as an arena for public discourse. It aims to examine three main aspects: (1) what kind of 'public' arena Facebook represents for these Norwegian women, (2) how they experience others' communicative practices and participation on Facebook, and (3) considerations they have when participating in this public arena, including the effort or choices to not participate in a visible way.

The term public arena used in this study stems from Nancy Fraser (1992). Her criticism of Habermas claimed that the 'sphere' excluded many people, including women. For example, Iris Young (1989) argues that while the public realm is paraded as universal values and norms, it derives from specifically masculine experiences that excluded women due to its separation from the private sphere and the focus on dispassionate rationality and independence. Additionally, the focus on rational deliberation and agreement excluded struggle and contention to be part of the 'sphere'. Instead of one unified sphere, she argued that there are several competing public arenas (Fraser, 1992), and this study looks at Facebook as such an arena.

Public discourse is considered to include various dimensions of public life, such as political discussions, public exchanges of opinion, debates of societal relevance, civic engagement, and other non-labelled activities. The term 'public' has been said to 'connote ideas of citizenship, commonality, and things not private, but accessible and observable by all' (Papacharissi, 2002: 10). A broad interpretation of Facebook as a public arena is beneficial in this study since women are socially committed in ways not necessarily picked up in conventional understandings of public or political participation (Norris, 1991).

Since women's public commitment is often undetected, this study focused on their experience as users of Facebook. User *experience* has been described as 'a person's perceptions and responses resulting from the use or anticipated use of a product, system or service' and 'encompasses all the user's 'emotions, beliefs, preferences, perceptions, (...) behaviours and accomplishments that occur before, during and after use' (Mirnig et al., 2015).

As the literature review will demonstrate, research on social media tends to focus on visible activity, such as posting or sharing, and not on experience, cognitive effort, or considerations of users who participate in a way that cannot be observed. This

study employs an audience-centric perspective departing from these women's actual everyday experiences with Facebook as an arena for public discourse. The value of exploring user experience goes beyond examining visible participation. It addresses vague or non-labelled user activity and dispenses with the dichotomy of participation and non-participation, which visible and non-visible activity on SNS is often reduced to (Crawford, 2009).

This study was conducted in Norway, a society characterised by equal rights and freedom of speech (Freedom-House, 2018; Reporters-without-borders, 2019), and where 83 % of the adult population are users of Facebook (Statista, 2020), and 44 % report to use Facebook for news (Moe & Bjorgan, 2021). Nonetheless, Norwegians, in general, are not particularly active in online debates (Reuters, 2017), and even if women have equal rights and are represented in politics, online public participation is still found to be gendered (Enjolras, 2014).

2. LITERATURE REVIEW

This study aims to explore women's everyday experiences of Facebook as an arena for public discourse, comprising experiences of the arena itself, the experience of others' participation, and the experience of participating both visibly and not. Three aspects of the research literature are particularly relevant for this study, 1. the conceptualisation of Facebook as a public arena, 2. the conceptualisation of participation on Facebook, and 3. gendered communication differences in public participation.

2.1. Facebook as a particular Public Arena

Facebook is frequently discussed as a public arena as users can come together and exchange ideas which include a plurality of voices and interests. According to boyd (2010), SNS are networked publics that 'are simultaneously (1) the space constructed through networked technologies and (2) the imagined collective that emerges as a result of the intersection of people, technology, and practice' (39). Conversely, both the social dynamics and the technical design of Facebook impact the conditions for taking part in this public arena, which in turn conditions the experience of Facebook as a place for public discourse. For example, users on Facebook have an unknown audience, and contexts may collapse into each other (boyd and Ellison, 2007), which is likely to trigger uncertainty and impact participation (Baym and boyd, 2012).

Discussing Facebook as a public arena is particularly challenging, as SNS enable users to move back and forth between unevenly distributed levels of personal and public topics (Burkell et al., 2014; Papacharissi, 2015), and private spheres where users engage in public conversations privately – not behind closed doors, nor in full view of the public (Papacharissi, 2015). Wahl-Jorgensen provides a further distinction when she describes that SNS "challenges conventional divides between the private and the public, the individual and the collective, and the personal and the

political" (2019, p. 151). As such, Facebook can be described as an arena that can 'formalise and inscribe a heretofore informal discourse that was already part of the public sphere' (Van Dijck, 2012, p. 165).

Facebook is mostly seen as an arena for personal and social discourse rather than an arena for public debate (Sakariassen, 2020). Still, instances of deliberative exchange may occur, as these generally are embedded in non-deliberative forms of discourse (Wessler, 2019: 109).

Facebook may not be understood exclusively as a public arena, but it is an instrument for communication and may function as an arena for public discourse from time to time. However, recent research has questioned whether civil online public participation is attainable (Schäfer, 2015: 322), with public and academic attention focused on the derogatory tone of public discourse (Lutz & Hoffmann, 2017; Rost et al., 2016). Moreover, fragmentation (Bruns & Highfield, 2015), limited non-egalitarian active participation, and the unclear impact of such participation (Dahlgren, 2013) have also brought the question of whether SNS are meaningful as public arenas.

2.2. Participation and Non-participation on Facebook

There is an underlying tendency to consider public participation on Facebook necessary, as public participation is framed as a distinctly beneficial phenomenon in political literature (Jenkins, 2006; Putnam, 2000). Additionally, Facebook relies on user-created content where norms for participation, through posting or sharing, are built into the platform (Nonnecke et al., 2006). Non-participation is viewed as a lack of desired citizen activity in political literature (Jenkins, 2006; Putnam, 2000) and lurking on SNS (Crawford, 2009). However, non-visible activity should be counted as participation. The literature describes users who actively log in and engage online, contributing to the community by paying attention and providing a gathered audience, labelled as *listening in* (Crawford, 2009; Sun et al., 2014). Listening in involves considerable cognitive and emotional effort (Ewing, 2008) and may result from an active choice (Casemajor et al., 2015). Additionally, researchers have argued that having a voice is only meaningful when these voices are being listened to by others (Couldry, 2006).

There are several reasons why users do not visibly participate in the public environment of Facebook. One reason is the malicious tone in online discourse that generates the feeling of having less control and the need to shield oneself from potential attacks (Bazarova & Choi, 2014; boyd, 2008; Litt, 2012; Marwick & boyd, 2011; Stroud et al., 2016). Online communication is frequently concerned with 'venting emotion and expressing hasty opinions' instead of rational debate (Papacharissi, 2002: 15), political discussions on Facebook are associated with rants and drama (Vraga et al., 2015), and numerous studies have observed comments that deny and disrespect opposing views (Hwang et al., 2018; Ruiz et al., 2010). Such behaviours are concerning, as they harm democratic values and favour polarisation (Anderson et al.,

2014). As expected, everyday political interaction on Facebook is defined by uncertainty, ambiguity, and a high level of variation in perceptions of what is appropriate (Thorson, 2014), and conversations mostly take place in private chats and less within the public spaces of Facebook (Sakariassen, 2020; Swart et al., 2018). In line with such findings, people are also less likely to voice a deviant opinion online (Neubaum & Krämer 2016).

2.3. Gendered Communication Differences in Political and Public Participation

Politics and public participation follow *societal structures of privilege and discrimination* and have traditionally been viewed as a masculine arena (Norris, 1991). Earlier research has, for example, found that women are less inclined to discuss political matters (Miller et al., 1999) and have fewer political discussions outside the privacy of their homes (Huckfeldt & Sprague, 1995). Such findings can partly be attributed to a gendered communication style (Burns et al., 2001; Cook et al., 2007; Suzuki, 2006). Additionally, research has found a gendered preference for certain types of communication, where women are found to prefer dialogue over debate (Costera Meijer, 2001). Dialogue is described as directed toward collaboration, problem-solving, and taking others seriously, while debate is the language of opposition, winning, and counterarguments. Many studies indicate the prevailing power of unequal structures, such as patriarchy, in the digital age (Yin & Yu, 2020). For example, a recent study suggests that there exists a gender gap in online public participation (Lilleker et al., 2021). While some have linked this to a hostile environment (Abendschön & García-Albacete, 2021), others argue that it is a product of women's political socialisation more so than the civility of the site (Peacock & Van Duyn, 2021)

Other researchers argued that women do not participate less but differently than men. Norris (1991) revealed how women were heavily involved in community associations, voluntary organisations, and protest groups. Women are, for example, found to participate more than men in civic participation and social activism (Verba et al., 1995; Coffe & Bolzendahl, 2010). Moreover, research suggests that gendered dynamics involved in political participation or civic engagement are replicated on Facebook (Brandtzaeg, 2015). For instance, women are more likely to support humanitarian aid and environmental issues on Facebook than men but less likely to discuss institutionalised politics (Brandtzaeg, 2015). In addition, women are more likely to comment on or share personal topics, while men are more likely to post or comment on things of public interest (Wang et al., 2013). Recent research also suggests that women use private groups for support and discourse (Pruchniewska, 2019) or intentionally secret groups on Facebook to organise themselves (Van Duyn, 2020).

In order to understand women's experience of Facebook as an arena for public discourse, an encompassing concept of political, civic, and public participation is required. Furthermore, women's likely reluctance to participate in debate settings

must be considered. Therefore, Facebook should be considered an arena allowing both observable participation and participation through "listening in" (Crawford, 2009).

3. MATERIALS AND METHODS

Thirty in-depth interviews with female Facebook users, which stemmed from two waves of data collection, formed the data for this study[1]. Appendix One contains an overview of the participants.

The first wave was a part of Media, Culture and Public Connection project (MeCIn). Participants were recruited through networks and snowballing to "mirror" the Norwegian population according to demographic criteria such as gender, age, and type of work (Hovden & Moe, 2017). Fifty participants were interviewed twice in the fall of 2017, but this analysis only includes a subsample of 20 women who were regular users of Facebook. The semi-structured interviews comprised a broad range of questions, starting with a day in a life method (del Rio Carral, 2014) and questions about social media use. Key tendencies from the reading of this material were built upon in the second wave of interviews, which focused exclusively on women's user experience of SNS and Facebook.

The second wave of data collection was in-depth interviews with ten additional women who used Facebook in their daily lives. Theoretical sampling was selected to discover variations and gaps within this group (Gubrium et al., 2012). Expecting that variations would influence experiences of public environments, 1. age diversity (Brandtzaeg et al., 2011; Gardner & Davis, 2013), 2. profession/work environment (Emler & Frazer, 1999), and 3. educational background (Bovens, 2017; Spruyt et al., 2018), were used as sampling criteria throughout the recruiting. The participants were recruited through networks and snowballing. The data reached sufficient saturation (Guest et al., 2006) after ten interviews, bearing in mind that these were an expansion of the twenty interviews from the first wave of data collection. Appendix Two shows the interview guide from both waves of data collection.

Interview transcripts were analysed using interpretive repertoire analysis (Potter and Wetherell, 1987), which looks at the social function of language, including implicit use and context (Wertz, 2011:60-63; Wetherell, 2001). Interpretive repertoires identify descriptions, routine arguments, and evaluations considered the 'building blocks' (Wetherell, 1998: 173) speakers use to make sense of everyday life. This study aims to examine how people talk and make use of language to construct their understanding of Facebook as an arena for public discourse.

4. RESULTS AND DISCUSSION

1 Both studies were assessed by the Norwegian Centre for Research Data and all participants gave their written, informed consent to participate in the study. Participant information is kept anonymous, using pseudonyms for reference.

The results were divided thematically into five repertoires. First, the *behind the curtains but pays attention repertoire* revealed how these women discuss their internal conflict of not participating in debates yet feeling like they should participate. Second, the *deliberative ideals repertoire* referred to patterns in discourse displaying a negotiation of ideals for public discussion. Third, *it feels like total exposure repertoire* describes Facebook as several different spaces, with some considered more precarious than others and the wish - or need - to stay hidden. Fourth, *the expectation of adverse reactions repertoire* is used by women who characterise participating in debates on Facebook as high risk due to potential hostile responses, even though this characterisation rarely is based on direct personal experiences. Fifth, *the hit and run repertoire* involves an unwillingness to listen to people's responses due to fear of adverse reactions and, as such, illustrates behaviour related to such worry.

Although the participants were women, they were different in terms of age and background. There is a danger in talking about women as a single group, as we cannot assume that they share common experiences based on gender (Young, 1989). This material shows differences in what Facebook was used for and how integrated the platform was in the participants' everyday lives. However, when it came to Facebook as a public arena, the participants in this study had surprisingly similar accounts.

4.1. The behind the curtains but pays attention repertoire

The use and role of Facebook in everyday life formed a backdrop for the repertoires these women employed in dealing with this arena for public discussion. The participants were mostly daily users of Facebook as their preferred SNS, often combined with other platforms. Daily use of Facebook included social functions and was considered essential for keeping up with the latest information. All participants were also daily consumers of mainstream news published outside social media; however, Facebook often appeared to be an integrated part of navigating news and other types of information.

> *I often come across news stories that interest me, especially relating to the environment and feminism through social media, because of what people in my network share. But I am mostly someone who 'just hides behind the curtains and pays attention' rather than being particularly active myself…*
>
> Eva, HR advisor, 40

Eva's description of being fairly invisible is far from unique. This repertoire was used to describe preferring the role of an observer over 'active' sharing or posting in debates on Facebook. Such discourse displayed a common understanding that this is not how one is 'supposed to' behave on this platform, as one should participate. Participation or being active were used as synonyms for being visible. On the other

hand, 'listening in' (Crawford, 2009) was derogatorily described by interviewees as 'lurking' or being just a spectator with the emphasis on 'just'.

> *- Would you post anything on Facebook?*
> *- I am not really 'political'.*
> *- It sounds like you are.*
> *- Only in politics related to substance abuse (...). I see a lot of politics (party politics on Facebook), but I avoid it, I do not go into it, I will not 'put my thumb up' ('like'), because then you take a stand, and I would rather not do that.*
>
> Rachel, Retired / leader of a volunteer organisation, in her 70s

The answers to a general question about posting on Facebook indicate a shared collective awareness of Facebook as a public environment evoking ideals of active citizen participation. Rachel also implies that one would have to be particularly interested in institutionalised politics to post something, which can be seen as a redefinition of what is political that align with her decision to engage in some instances online and not in others. Nonetheless, this repertoire involved the choice to mostly abstain from being visible in this online public arena while paying attention, which made the participants conflicted about their actual activity. This repertoire displays a cognitive dissonance between what these women do and what they think they should do. Such a notion differs from earlier research that found that general users considered expressing political views on Facebook inappropriate and not the 'right place for politics in everyday life (Gustafsson, 2012). The result in both cases is limited posting on Facebook. However, the current study suggests that the participants consider Facebook an appropriate place for public discourse, even if they are hesitant to participate visibly.

4.2. The deliberative ideals repertoire

The deliberative ideals repertoire is linked to discourse about the ideals and potential of debates on Facebook, revealing that Facebook as an arena for public discussion breaches certain democratic conventions.

Ideals of democratic deliberation were revealed through implicit descriptions of public discussion and suggested that Facebook debates fall short of such ideals. Negative descriptions of 'uncivil participation', 'aggressiveness', 'irrational arguments', and debates and people that are 'too emotionally driven', implied comparison between debates on SNS and an implicit standard, which incidentally resembles deliberative ideals. Habermas´ (1991) concept of the public sphere is generally known to favour rational deliberation that allows for opposing views yet focuses on understanding each other and letting the best argument win. Fraser (1992) criticised the normativity in rational discourse that excludes contention and focuses on agreement. However, the democratic ideals that are part of this repertoire do not contest

such normativity. Instead, the participants were particularly critical of people who were not oriented toward a consensus, that strayed from the discussed topic, or used emotional language (Sakariassen, 2021).

As Facebook debates did not adhere to the implied standard, this repertoire involved worry about participating and not gaining anything from it. Thus, the feeling of obligation to participate collided with a breach of ideals of democratic deliberation. Earlier research uncovered complaints about political issues reduced to being a for/against dichotomy (Gustafsson, 2012), which is in line with these participants describing discourse on Facebook to only allow for extreme opinions and that it is difficult to participate on those terms.

> *Then I was suddenly a part of a very long discussion with extreme reactions. (...) I remember thinking that 'I am not that convinced by the view that I put forward here', and I ended up with more extreme arguments than my actual opinion. You feel a bit trapped then. So, there was this line of argument (...) that was less nuanced than my actual view.*
>
> Dagny, communication advisor, 40s

Behind the curtains but pays attention repertoire described that these participants mostly *listen in*. *The deliberative ideals repertoire* is part of the same overarching theme. However, it illustrates that taking part in a Facebook debate also was considered part of the general self-presentation. The concern was about 'losing' the debate itself and making oneself vulnerable to being seen in an unfavourable light. In such a setting, potential counterarguments and criticism interfere with self-realisation, producing a debate climate that hinders discussions. Similar sentiments in this repertoire included not wanting to 'appear political' or 'impose a view on other people'. Along these lines, a previous study of everyday talk argued that a political discussion is an opportunity for citizens to rationally exchange opinions and an act of self-expression (Conover & Searing, 2005). *The deliberative ideal repertoire* can, thus, be attached to the experience of evaluating the presence of democratic ideals in Facebook discourse and communicating their understanding of who they are.

4.3. The it feels like total exposure repertoire

When asking about posting or sharing things outside of chats on Facebook, the question of 'where?' typically came up. The repertoire *of it feels like total exposure* distinguished between 'own Facebook', referring to posting a status update that will appear on one's own Facebook wall, and other places, such as large or public open groups or debate sections of news outlets. The different venues for participation within Facebook are described in terms of exposure. This narrative compared the security of being hidden and feeling more in control with venturing into the unknown, expecting danger, and not feeling safe to get involved.

> *It should have been anonymous (...) then I might have been more daring (in debate sections on Facebook). Out there is suddenly the whole wide world, or all of Norway ... people who don't know me (...) It feels like total exposure.*
>
> Maria, student, early 20s

The repertoire involved experiencing that the debate sections on Facebook are too far-reaching. There is no camouflage and nowhere to hide, relating to potentially becoming a target of unwanted or hostile reactions. The quote also illustrates an implicit expectation of posts going viral. Another aspect of this repertoire is choosing certain settings for the Facebook profile, specifically not to take part in public discussion.

> *I have made quite a conscious decision to not comment on other people's posts or to post things in groups. If I wanted to start a debate (...) that would not work well, because I have a closed profile.*
>
> Dagny, communication advisor, 40s

Such opinions indicated that this repertoire involved thinking about different spaces within Facebook and that privacy settings could be understood as a metaphorical curtain between being hidden or exposed. Choosing to stay behind the curtains is reminiscent of the more traditional divide between the private and public sphere, where within the structure of privilege, some people experience the "right" to be heard and others do not (Young, 1989).

The experience of what a debate on Facebook generally is appeared to be an inhibiting factor for voicing opinions, even in the more controlled setting of their own Facebook wall. Such inhibition can potentially be attributed to the affordances of SNS. Earlier research has found that SNS is a unique place to look at perceptions of risk and fear around expression and that persistence or the notion that a post would linger online reduces willingness to express an opinion (Fox & Holt, 2018).

Facebook was predominantly understood as a public environment, despite this repertoire involving the choice to only be active behind 'closed curtains' and not expose themselves. While the repertoire *it feels like total exposure* describes the choice to stay hidden, the previously described repertoire of *hiding behind closed curtains but paying attention* represents the cognitive dissonance in not being visibly active.

Facebook was experienced as a political space, and even small acts of engagement (Kleut et al., 2018), such as 'liking', required a political stance. In short, such repertoire involved denying oneself Facebook as a public platform due to worry about exposure.

4.4. The expectation of adverse reactions repertoire

A shared repertoire that all participants used referred to the hostile debate climate that only allowed for 'extreme opinions', 'debates that tended to derail', and the use

of 'personal attacks' and 'derogatory tone'. This repertoire involved the notion that voicing an opinion was risky and came with the expectation of hostile responses. More importantly, this notion stemmed primarily from observing online commentary fields and how the news media or society discussed SNS debates, yet rarely based on direct personal experiences.

> *You hear about it happening in the news, right? But I do not experience anything like that in my day-to-day life (on Facebook). So, it is hard for me to say something about the extent to which this happens.*
>
> Kristine, Architect, 30s

The expectation of adverse reactions, even if it contradicted real experiences of using Facebook, discouraged the participants from voicing their opinions. This expectation can be understood as a shared narrative of Facebook being hostile that seemed to stem mainly from popular views and folk theories (Palmer et al., 2020). Folk theories can be more or less explicit and based on second-hand sources (Palmer et al., 2020). Still, the perceived dangers and the discourse surrounding women's online participation (Lewis et al., 2016) seem so off-putting that these women are hesitant to participate. On a similar note, worry about other users' potential behaviour is the most common reason users generally experience inhibition when wanting to post (Sakariassen & Meijer, 2021). Furthermore, users of SNS are prone to hold back their opinion because they cannot control the reactions of others (Neubaum & Krämer, 2018).

4.5. The hit and run repertoire

A recurring narrative in these interviews was about considerations and strategies developed explicitly for avoiding debate situations on Facebook, such as self-censoring (Hayes et al., 2006) or posting only for a limited audience to avoid audience collapse (boyd, 2010). Other strategies found when posting on Facebook are to phrase the message vaguely (Mor et al., 2015) or use emotional language (Sakariassen, 2021).

Most participants had posted at some point, particularly when they 'felt exasperated' that important arguments or angles were 'left out' and that 'something had to be said'. Posting in these cases was considered a form of responsibility.

> *If I share something on Facebook or if I post something, I feel something similar to anxiety afterward. Like, 'Oh shit, now I published something and here come the reactions'. (...) I feel like I am baring my soul in some ways... who I am and what I stand for.*
>
> Kristine, Architect, 30s

In situations where posting was involved, the previous repertoires have illustrated the feeling of exposure and expectation of hostility. Closing the Facebook tab directly

after posting or closing the entire laptop, illustrated the discomfort of feeling exposed and potentially attacked. Furthermore, the discomfort made these participants less open to other peoples' arguments due to worry rather than intent.

> *- I won't bother discussing, but I will leave a comment.*
> *- So, you comment once?*
> *- Yes, but no discussions. I just close the window. I don't really want to know what others think.*
>
> Anna, beautician, 50s

Above is an example of this repertoire used by Anna, who stands out from the other participants by posting on Facebook daily. After posting, she and others employed coping mechanisms that can be described as a hit and run repertoire. Earlier research found that citizens consciously applied reciprocity to discussions. However, they sometimes fail to practice it, particularly when shielded from face-to-face interactions (Conover & Searing, 2005). Similarly, the 'hit and run' repertoire indicates an unwillingness to listen to people's responses to their posts, particularly due to fear of adverse reactions.

In addition, the participants expressed SNS-specific worries, such as fear of the debate splitting into 'several different strands' that would require 'different types of arguments' or that debates happen spontaneously, and they had to come up with counterarguments 'on the spot'. Debates were also described as mainly about being right, 'convincing others', or 'winning the argument', indicating undemocratic sentiments. The participants also frequently described debates as conflicts they wanted to avoid.

Even in the rare cases where these participants did post and thus lived up to their active citizen ideal, they tended to fail to follow democratic standards, such as being open and listening.

5. CONCLUSIONS

This paper provides insight into women's user experience of Facebook as a public arena, addressing a demographic that rarely visibly participates in Facebook debates.

Five repertoires were revealed in this analysis, and the same participants employed multiple repertoires as they are not mutually exclusive. These repertoires were based on moral dimensions of being a citizen and ideals regarding public discussion. Furthermore, a view of Facebook as an arena for public discussions that invokes worry and negativity toward activity and others that do not adhere to such ideals was detected. However, the results also indicated that worry was a key factor in negotiating these ideals and unintentionally replacing them with behaviours that may harm public discussion. As such, these repertoires represent conflicting social norms: being an active citizen taking part in deliberation and expressing one's

viewpoints versus being a responsible social media user shielding oneself from online hostility.

Facebook is, by these participants, experienced as a particular kind of public arena that involves exposure and worries, an arena, in its essence, where one fights, win or lose. Such findings are in line with earlier studies that have discussed online participation as uncivil or derogatory (Lutz & Hoffmann, 2017; Rost et al., 2016) and that this generates a need to shield oneself from potential attacks (Bazarova & Choi, 2014; boyd, 2008) or express a deviant opinion in an offline setting instead of online (Neubaum & Krämer 2016). Muddiman (2017) makes the distinction between personal-level incivility (impoliteness) and public-level incivility (lack of deliberativeness and reciprocity). However, in this study, such a distinction is not clear. What is clear is that there is a discrepancy between the narrative of hostility and the direct experience these women have, indicating that the narrative comes first and determines the experience.

In democratic theory, meaning is mostly discussed in normative terms, emphasising visible participation (Jenkins, 2006; Putnam, 2000). These women's use of Facebook may not be meaningful in those terms. Still, the participants experience the platform as a meaningful connection point as they use Facebook to connect to and explore public discourse and public issues, hidden and private. Although these participants might chat about issues, there was little evidence of them sharing experiences and building community in private Facebook groups, as found in earlier research (Pruchniewska, 2019). The experiences found in the current study can be described as a one-way connection to information but not a connection to other people. Baym and boyd (2012) discuss "socially-mediated publicness" as a way in which people assess their own presence on social media platforms and make decisions on how to engage. Concerning such description, the results indicate a "privately-mediated publicness" where Facebook provides a public arena for hidden or private participation. These participants describe hostile individuals and not an 'imagined collective' (boyd, 2010). Still, Facebook presents an important public arena for these women. The activity mostly happens without visible trails, yet being a citizen is also about connecting to issues, learning new information, and making up one's mind, even if that does not entail visible participation. As such, Facebook as a public arena may have more impact on women than it appears.

This study analysed how women experience communicative practices and participation on Facebook. The participants wish for dialogue but experience Facebook as a place for debate. In that way, these results indicate the experience of communicative practices on Facebook as gendered and add to earlier research that has established that women are less likely than men to enjoy debate as a type of communication (Meijer, 2001), political discussions (Verba et al., 1997) or post or comment on things of public interest on Facebook (Wang et al., 2013). However, to what degree the other findings in this study apply only to women is somewhat unclear.

The experience is that Facebook debates require a 'hit and run attitude', more than

a 'listen and discuss attitude'. Such a repertoire reveals behaviour that is problematic for public debate. In public debate, one becomes visible to the public (Schudson, 1997), and by participating in public discourse, one ideally commits to listening to and addressing criticism and counterarguments (Habermas, 1991). Avoiding others' response due to fear eliminates the possibility of discussion. Therefore, one could say that having an arena for debate that is experienced as hostile is damaging to the level of visible participation and to how such participation is carried out. A study of everyday talk has found that it can be at odds with the normative goals of democratic deliberation (Conover & Searing, 2005) and that citizens do not especially want to justify their own opinion (Conover et al., 2001). While the unwillingness to listen, justify, and deliberate is not new, Facebook seems to replicate social structures that make visible participation difficult (Young, 1989), yet also allows users an easier exit and, in that way, enable a hit and run attitude.

Some findings were surprising. Even if strategically choosing not to mention democratic ideals (or similar concepts) during the interviews, these ideals pop up as part of the discourse about Facebook. It was also unexpected that these ideals would resemble Habermas's and cause women to feel guilty about not visibly participating in Facebook debates and have such derogatory descriptions of their type of participation. Additionally, it was unexpected that none of the participants considered women particularly exposed to harassment when posting. Instead, they answered this question concerning worry about other social collectives (Young, 1989), such as immigrants.

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REFERENCES

Abendschön, S., & García-Albacete, G. (2021). It's a man's (online) world. Personality traits and the gender gap in online political discussion. *Information, Communication & Society, 24*(14), 2054-2074. https://doi.org/10.1080/1369118X.2021.1962944

Anderson, A. A., Brossard, D., Scheufele, D. A., Xenos, M. A., & Ladwig, P. (2014) The "nasty effect:" Online incivility and risk perceptions of emerging technologies. *Journal of Computer-Mediated Communication, 19*(3), 373–387. https://doi.org/10.1111/jcc4.12009

Baym, N. K., & boyd, D. (2012) Socially Mediated Publicness: An Introduction. *Journal of Broadcasting and Electronic Media, 56*(3), 320–329. https://doi.org/10.1080/08838151.2012.705200

Bazarova, N. N., & Choi, Y. (2014) Self-Disclosure in Social Media. *Journal of Communication, 64*(4), 635–657. https://doi.org/10.1111/jcom.12106

Bode, L. (2017). Closing the gap: gender parity in political engagement on social media. *Information, Communication & Society*, *20*(4), 587-603. https://doi.org/10.1080/1369118X.2016.1202302

Bovens, M. (2017) *Diploma democracy: the rise of political meritocracy*. New York, NY: Oxford University Press.

Boyd, D. (2008) *Taken out of context: American teen sociality in network publics*. Berkeley: University of California.

Boyd, D. (2010) Social network sites as networked publics: Affordances, dynamics, and implications. In: Papacharissi Z (ed) *A networked self: Identity, community, and culture on social network sites*. New York: Routledge, 47–66.

Boyd, D., & Ellison, N. B. (2007) Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication, 13*(1), 210–230. https://doi.org/10.1111/j.1083-6101.2007.00393.x

Brandtzaeg, P. B. (2015) Facebook is no "Great equalizer": A big data approach to gender differences in civic engagement across countries. *Social Science Computer Review* 35(1), 103–125. https://doi.org/10.1177/0894439315605806

Brandtzaeg, P. B., Heim, J., & Karahasanović, A. (2011) Understanding the new digital divide—A typology of Internet users in Europe. *International Journal of Human-Computer Studies, 69*(3), 123–138. https://doi.org/10.1016/j.ijhcs.2010.11.004

Bruns, A., & Highfield, T. (2015) Is Habermas on Twitter?: Social media and the public sphere. In: Bruns, A., Enli, G., Skogerbø, E., Larsson, A. O. & Christensen, C. (eds) *The Routledge companion to social media and politics*. New York: Routledge, 56–73.

Burkell, J., Fortier, A., Wong, L. Y. C., & Simpson, J. L. (2014) Facebook: public space, or private space? *Information, Communication and Society, 17*(8), 974–985. https://doi.org/10.1080/1369118X.2013.870591

Burns, N., Schlozman, K. L., & Verba, S. (2001) *The private roots of public action: Gender, equality, and political participation*. Harvard University Press.

Casemajor, N., Couture, S., Delfin, M., Goerzen, M., & Delfanti, A. (2015) Non-participation in digital media: toward a framework of mediated political action. *Media, Culture and Society, 37*(6), 850–866. https://doi.org/10.1177/0163443715584098

Coffe, H., & Bolzendahl, C. (2010) Same Game, Different Rules? Gender Differences in Political Participation. *Sex Roles, 62*(5-6), 318-333.

Coleman, S., & Ross, K. (2010). *The media and the public:" them" and" us" in media discourse* (Vol. 9). John Wiley & Sons.

Conover, P. J., Searing, D.D., & Crewe, I. (2001) 'The deliberative potential of political discussion', *British Journal of Political Science* 31, 21–62.

Conover, P. J., & Searing, D. D. (2005) Studying 'everyday political talk' in the deliberative system. *Acta Politica, 40*(3), 269-283.
Cook, F. L., Carpini, M. X. D., & Jacobs, L. R. (2007) Who deliberates? Discursive participation in America. In: Rosenberg SW (ed) *Deliberation, participation and democracy*. London: Palgrave Macmillan, 25–44.
Couldry, N. (2006). *Listening beyond the echoes – Media, ethics, and agency in an uncertain world*. Boulder: Paradigm.
Crawford, K. (2009) Following you: Disciplines of listening in social media. *Continuum, 23*(4), 525–535. https://doi.org/10.1080/10304310903003270
Dahlgren, P. (2013). *The political web: Media, participation and alternative democracy*. London: Palgrave Macmillan.
del Rio Carral, M. (2014). Focusing on "A Day in the Life": An Activity-Based Method for the Qualitative Analysis of Psychological Phenomena. *Qualitative Research in Psychology, 11*(3), 298-315. https://doi.org/10.1080/14780887.2014.902525
Emler, N., & Frazer, E. (1999). Politics: The education effect. *Oxford Review of Education* 25(1-2), 251–273.
Enjolras, B. (2014). *Social media and the new public sphere: consequences for citizenship and democracy*. The Norwegian Research Council, Oslo.
Ewing, T. (2008). Participation cycles and emergent cultures in an online community. *International Journal of Market Research, 50*(5), 575–590.
Fox, J., & Holt, L. (2018). Fear of Isolation and Perceived Affordances: The Spiral of Silence on Social Networking Sites Regarding Police Discrimination. *Mass Communication and Society, 21*(5), 533-554. https://doi.org/10.1080/15205436.2018.1442480
Fraser, N. (1992). «Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy». I: Craig Calhoun (red), Habermas and the public sphere. Cambridge, Mass: MIT Press.
Freedom-House. (2018). *Freedom in the World 2018*. Retrieved from: https://freedomhouse.org/report/freedom-world-2018-table-country-scores
Gardner, H., & Davis, K. (2013). *The app generation: How today's youth navigate identity, intimacy, and imagination in a digital World*. New Haven, CT: Yale University Press.
Gil de Zuniga, H., Copeland, L., & Brimmer, B. (2014). Political Consumerism: Civic Engagement and the Social Media Connection. *New Media & Society, 16*(3), 488-506. https://doi.org/10.1177/1461444813487960
Gubrium, J. F., Holstein, J. A., Marvasti, A. B., & McKinney, K. D. (2012). *The SAGE handbook of interview research: The complexity of the craft*. Thousand Oaks, CA: Sage Publications.
Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field methods, 18*(1), 59–82. https://doi.org/10.1177/1525822X05279903

Gustafsson, N. (2012). The subtle nature of Facebook politics: Swedish social network site users and political participation. *New Media & Society*, *14*(7), 1111-1127. https://doi.org/10.1177/1461444812439551

Habermas, J. (1991). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. MIT press.

Hayes, A., Scheufele, D., & Huge, M. (2006). Nonparticipation as Self-Censorship: Publicly Observable Political Activity in a Polarized Opinion Climate. *Political Behavior, 28*(3), 259–283.

Hovden, J. F., & Moe, H. (2017). A sociocultural approach to study public connection across and beyond media: The example of Norway. *Convergence, 23*(4), 391–408. https://doi.org/10.1177/1354856517700381

Huckfeldt, R. R., & Sprague, J. (1995). *Citizens, politics and social communication: Information and influence in an election campaign*. Cambridge University Press.

Hwang, H., Kim, Y., & Kim, Y. (2018). Influence of discussion incivility on deliberation: An examination of the mediating role of moral indignation. *Communication Research, 45*(2), 213–240. https://doi.org/10.1177/0093650215616861

Jenkins, H. (2006). *Confronting the challenges of participatory culture: Media education for the 21st century*. MIT press.

Kleut, J., Pavlíčková, T., Picone, I., De Ridder, S., Romic, B., & Hartley, J. M. (2018). Emerging Trends in Small Acts of Audience Engagement and Interruptions of Content Flows. In Das, R., & Ytre-Arne, B. (eds) *The Future of Audiences: A Foresight Analysis of Interfaces and Engagement*. London: Palgrave Macmillan, 123–140.

Kushner, S. (2016). Read only: The persistence of lurking in Web 2.0. *First Monday* 21(6).

Lewis, R., Rowe, M., & Wiper, C. (2016). Online Abuse of Feminists as An Emerging form of Violence Against Women and Girls. *The British Journal of Criminology*, *57*(6), 1462-1481. https://doi.org/10.1093/bjc/azw073

Lilleker, D., Koc-Michalska, K., & Bimber, B. (2021). Women learn while men talk?: revisiting gender differences in political engagement in online environments. *Information, Communication & Society*, *24*(14), 2037-2053. https://doi.org/10.1080/1369118X.2021.1961005

Litt, E. (2012). Knock, Knock. Who's There? The Imagined Audience. *Journal of Broadcasting and Electronic Media, 56*(3), 330–345. https://doi.org/10.1080/08838151.2012.705195

Lutz, C., & Hoffmann, C. P. (2017). The dark side of online participation: exploring non-, passive and negative participation. *Information, Communication and Society, 20*(6), 876–897. https://doi.org/10.1080/1369118X.2017.1293129

Malinen, S. (2015). Understanding user participation in online communities. *Computers in Human Behavior,* 46, 228–238. https://doi.org/10.1016/j.chb.2015.01.004

Marwick, A. E., & Boyd, D. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media and Society, 13*(1), 114–133. https://doi.org/10.1177/1461444810365313

Meijer, I. C. (2001). The Public Quality of Popular Journalism: developing a normative framework, *Journalism Studies*, 2:2, 189-205

Miller, P.R., Bobkowski, P.S., Maliniak, D., & Rapoport, R. B. (2015). Talking Politics on Facebook: Network Centrality and Political Discussion Practices in Social Media. *Political Research Quarterly, 68*(2), 377-391. https://doi.org/10.1177/1065912915580135

Mirnig, A.G., Meschtscherjakov, A., Wurhofer, D., Meneweger, T., & Tscheligi, M. (2015). *A formal analysis of the ISO 9241-210 definition of user experience*. The 33rd annual ACM conference on human factors in computing systems.

Moe, H., & Bjorgan, J. (2021). *Reuters Digital News Report: Norway*. https://nyhetsbruk.w.uib.no

Mor, Y., Kligler-Vilenchik, N., & Maoz, I. (2015). Political expression on Facebook in a context of conflict: Dilemmas and coping strategies of Jewish-Israeli youth. *Social Media+ Society*, *1*(2), https://doi.org/10.1177/2056305115606750

Muddiman, A. (2017). Personal and public levels of political incivility. International *Journal of Communication*, 11, 21.

Neubaum, G., & Krämer, N. C. (2018). What do we fear? Expected sanctions for expressing minority opinions in offline and online communication. *Communication Research*, *45*(2), 139-164. https://doi.org/10.1177/0093650215623837

Neuman, W. R, Bimber, B., & Hindman, M. (2011). The Internet and Four Dimensions of Citizenship. In: Edwards III G C, Jacobs L R and Shapiro R Y (eds) *The Oxford Handbook of American Public Opinion and the Media*. Oxford University Press.

Nonnecke, B., Andrews, D., & Preece, J. (2006). Non-public and public online community participation: Needs, attitudes and behavior. *Electronic Commerce Research, 6*(1), 7–20.

Norris, P. (1991). Gender Differences in Political Participation in Britain: Traditional, Radical and Revisionist Models. Government and Opposition 26(1), 56–74.

Palmer, R., Toff, B., & Nielsen, R. K. (2020). 'The Media Covers Up a Lot of Things': Watchdog Ideals Meet Folk Theories of Journalism. *Journalism Studies, 21*(14), 1–17. https://doi.org/10.1080/1461670X.2020.1808516

Papacharissi, Z. (2002). The virtual sphere: The internet as a public sphere. *New media & society, 4*(1), 9-27. https://doi.org/10.1177/14614440222226244

Papacharissi, Z. (2015). *Affective publics: Sentiment, technology, and politics*. Oxford University Press.

Peacock, C., & Van Duyn, E. (2021). Monitoring and correcting: why women read and men comment online. *Information, Communication & Society*, 1-16. https://doi.org/10.1080/1369118X.2021.1993957

Potter, J., & Wetherell, M. (1987). *Discourse and social psychology: Beyond attitudes and behaviour*. Thousand Oaks: Sage Publications.

Pruchniewska, U. (2019). "A group that's just women for women": Feminist affordances of private Facebook groups for professionals. *New Media & Society, 21*(6), 1362–1379. https://doi.org/10.1177/1461444818822490

Putnam, R. D. (2000). *Bowling alone: the collapse and revival of American community*. New York: Simon and Schuster.

Reporters-without-borders. (2019). *World Press freedom Index 2019*. Retrieved from: https://rsf.org/en/ranking

Rojas, H., & Puig-i-Abril, E. (2009). Mobilizers mobilized: Information, expression, mobilization and participation in the digital age. *Journal of Computer-Mediated Communication, 14*(4), 902–927. https://doi.org/10.1111/j.1083-6101.2009.01475.x

Rost, K., Stahel, L., & Frey, B. S. (2016). Digital social norm enforcement: Online firestorms in social media. *PLoS one, 11*(6). https://doi.org/10.1371/journal.pone.0155923

Ruiz, C., Massip, P., Micó-Sanz, J. L., Díaz-Noci, J., & Domingo, D. (2010). Conversation 2.0. and democracy. An analysis of reader's comments in Catalan online newspapers. *Communication and Society, 23*(2), 7–39.

Sakariassen, H., Hovden, J. F., & Moe, H. (2017). Bruksmønstre for digitale nyheter. Reuters Institute Digital News Report. Bergen: University of Bergen.

Sakariassen, H. (2020). A digital public sphere: Just in theory or a perceived reality for users of social network sites?. *MedieKultur: Journal of Media and Communication Research, 36*(68), 126–146. https://doi.org/10.7146/mediekultur.v36i68.118440

Sakariassen, H., & Meijer, I. C. (2021). Why so quiet? Exploring inhibition in digital public spaces. *European Journal of Communication, 36*(5), 494-510. https://doi.org/10.1177/02673231211017346

Sakariassen, H. (2021). Women's emotion work on Facebook: Strategic use of emotions in public discourse. *Computers in Human Behavior Reports*, 4, 100148. https://doi.org/10.1016/j.chbr.2021.100148

Schudson, M. (1997). Why conversation is not the soul of democracy. *Critical Studies in Mass Communication, 14*(4), 297–309.

Schäfer, M. S. (2015). Digital public sphere. In: Mazzoleni G (ed) *The international encyclopedia of political communication*. Hoboken, New Jersey: John Wiley & Sons, Inc, 1–7.

Spruyt, B., Kuppens, T., Spears, R., & van Noord, J. (2018). Talking Politics? Educational Category Salience Reinforces Differences in People's Willingness to Participate in Deliberative Initiatives. *Political Psychology, 41*(3), 461–478. https://doi.org/10.1111/pops.12558

Statista. (2020). *Share of Facebook users in Norway in Q3 2020, by age group*. Retrieved from: https://www.statista.com/statistics/584917/facebook-users-in-norway-by-age-group/

Stroud, N. J., Van Duyn, E., & Peacock, C. (2016). *News commenters and news comment readers. Engaging News Project*. Available at: https://mediaengagement.org/wp-content/uploads/2016/03/ENP-News-Commenters-and-Comment-Readers1.pdf

Sun, N., Rau, P. P-L., & Ma, L. (2014). Understanding lurkers in online communities: A literature review. *Computers in Human Behavior* 38, 110–117. https://doi.org/10.1016/j.chb.2014.05.022

Suzuki, S. (2006). Gender-linked differences in informal argument: Analyzing arguments in an online newspaper. *Women's Studies in Communication, 29*(2), 193–219.

Swart, J., Peters, C., & Broersma, M. (2018). Shedding light on the dark social: The connective role of news and journalism in social media communities. *New Media and Society, 20*(11), 4329–4345. https://doi.org/10.1177/1461444818772063

Thorson, K. (2014). Facing an uncertain reception: Young citizens and political interaction on Facebook. Information, Communication & Society, 17(2), 203-216.

Van Dijck, J. (2012). Facebook as a tool for producing sociality and connectivity. *Television and New Media, 13*(2), 160–176. https://doi.org/10.1177/1527476411415291

Van Duyn, E., Peacock, C., & Stroud, N. J. (2021). The gender gap in online news comment sections. *Social Science Computer Review, 39*(2), 181-196. https://doi.org/10.1177/0894439319864876

Verba, S., Burns, N., & Schlozman, K. L. (1997). Knowing and Caring about Politics: Gender and Political Engagement. *The Journal of Politics, 59*(4), 1051–1072.

Vraga, E. K., Thorson, K., Kligler-Vilenchik, N., & Gee, E. (2015). How individual sensitivities to disagreement shape youth political expression on Facebook. *Computers in Human Behavior*, 45, 281-289. https://doi.org/10.1016/j.chb.2014.12.025

Wahl-Jorgensen, K. (2019). *Emotions, media and politics*. John Wiley & Sons.

Wang, Y-C., Burke, M., & Kraut, R. E. (2013). Gender, topic, and audience response: an analysis of user-generated content on Facebook. In: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*.

Wertz, F. J. (2011). *Five ways of doing qualitative analysis: Phenomenological psychology, grounded theory, discourse analysis, narrative research, and intuitive inquiry*. Guilford Press.

Wessler, H. (2019). *Habermas and the Media*. Hoboken, New Jersey: John Wiley & Sons.

Wetherell, M. (2001). *Discourse theory and practice: a reader*. London: Sage Publications.

Wetherell, M., Potter, J. (1988). Discourse analysis and the identification of interpretative repertoires. Analysing everyday explanation: A casebook of methods.

Young, I. M. (1989). Polity and Group Difference: A Critique of the Ideal of Universal Citizenship. *Ethics, 99*(2), 250–274. http://www.jstor.org/stable/2381434

FROM "COVID IDIOTS" TO "COVIDSHOW AND "COVIDHYSTERIA". ANALYSIS OF DIGITAL NEWS COMMENTERS' VERBAL AGGRESSIVENESS AND MEANS OF LINGUISTICS CREATIVITY DURING COVID-19 PANDEMIC IN LATVIA (2020 – 2021)

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ABSTRACT

The main objective of this interdisciplinary study is to find out if verbal aggressiveness expressed by news commenters on the three largest digital news media (delfi.lv, tvnet.lv, apollo.lv) in Latvia fosters COVID-19 pandemic-related linguistic creativity during two state of emergency periods in Latvia (2020 – 2021). Did the commenters' dissatisfaction with the course of the pandemic and their response to the news of the pandemic contribute to the creation of new words related to COVID-19?

Using data provided by the Index of the Internet Aggressiveness (IIA), a research tool, and employing content analysis to evaluate the comments and pandemic-related words used in the comments, the study concludes that as the level of aggressiveness of commenters spikes, the use of COVID-19-related aggressive keywords and the number of new pandemic-related words increases as well. However, the aggressive words associated with COVID-19 account for a small proportion of commenters' aggressiveness and incivility during pandemic.

The most widely applied word-formation pattern to coin COVID-19 related words is the syntactic word-formation pattern, allowing the commenters to quickly create compound words, one part of which relates to COVID-19, while the other part expresses their attitude and assessment of the pandemic realities. Most of the new words are used only once and do not become a stable part of the commenters' vocabulary, thus showing the variability, instability, and fragmented character of communication in digital public sphere.

Keywords: digital media users' comments ▪ verbal aggressiveness ▪ linguistic creativity ▪ COVID-19 ▪ pandemic ▪ Latvia

1. INTRODUCTION

COVID-19 pandemic as a social and public health crisis (Walby, 2021) left an impact on individuals' daily life and communication, and the impact is still ongoing. When the pandemic broke out in 2020, the population in Latvia – just like in other countries – was overwhelmed by huge volumes of information, introducing new concepts describing the pandemic; the process has not stopped in the second year of the pandemic. Mass media allowed the population to follow information regarding the virus, epidemiological restrictions, and their impact on various spheres of life, governmental decisions, mask wearing, progression of the disease, vaccines, and the vaccination process, as well as research on COVID-19 daily.

In spring 2020 – the first wave of the pandemic – Latvia was among the countries with a low number of COVID-19 sufferers (SPKC, 2020, December12); however, when the second wave hit in autumn 2020, as well as in winter 2021, the situation in Latvia was dire (SPKC, 2021, February 2). Due to the rapidly growing infection rate, a state of emergency was declared in health care, followed by a curfew around the turn of the year (Skaties/Leta, 2021, November 18), restricting the mobility and other activities of the population even more.

The pandemic restrictions that required that most economically active citizens to stay at home led to an increase in the consumption of digital news media and local news usage online (Kim, Wang, & Malthouse, 2021). In 2021, 87% of the population of Latvia used Internet news portals, during the pandemic their use exceeded the use of television (81%) for the first time (Latvijas Fakti, 2021). To enable the public to constantly follow the information of the Covid-19 pandemic, the largest news portals delfi.lv. tvnet.lv and apollo.lv, which offer information in Latvian and Russian, announced that they are cancelling pay walls for news related to the pandemic. The society used social media, as well as commenting options provided by digital news media sites, to voice their opinion and discuss the latest information about the pandemic.

For the most part, COVID-19 news is characterised by negative connotations, as they inform about people dying, hazards of the disease, issues in the healthcare system, restrictions that change people's lives, and the inconsistency of decisions taken by the government managing the pandemic crisis. The COVID-19 news causes fear of illness, exacerbates insecurities about the economic situation (Zalc & Maillard, 2020), increases stress. These are just a few reasons for the frustration and anger evident in the media users' reaction to the pandemic news; the users direct their verbal aggression at news topics, individuals featured most prominently in the news (Rožukalne, Kleinberga & Grūzītis, 2021), as well as other commenters. The modes of audience participation offered by digital media to react to online news content characterize a process that Mark Deuze (2020) calls mass self-communication, when audience members create a communication network that connects many sources and many recipients. In this process, the reaction to the news (commenting, offering

a different perspective, etc.) can happen both synchronously with current events represented in the news and asynchronously, when the reaction of news users (the view of what is reflected in the news) is influenced by other commentators and the opinions expressed in the comments.

Given that the pandemic processes create contradictory and polarized opinions in the society, to explain the data of our research data on online news sites audience discussions in comments' environment, we use two theoretical approaches of mass communication, the second order media effect (Valkenburg & Peter, 2013), which explains the formation of attitudes over a longer period (Igartua, Ortega-Mohedano & Arcila-Calderón, 2020), and the concept of the digital public sphere (Papacharissi, 2002; Papacharissi, 2015; Rauchfleisch, 2017, Wahl – Jorgensen, 2019).

In this study, we define audience participation as a form of audience activity in which the reaction to news is not limited to cognitive, emotional, or affective engagement (Broersma, 2019), but leads to purposeful action, as a result of which audience members simultaneously create comments (opinions) and content (Kammer, 2013) (words), with the help of which they try to influence the discussion about the actualities of the pandemic.

To grasp and discuss the volatile reality of the pandemic, people had to not only learn new words and concepts pertaining to the virus and its prevention processes, but often to create them as well; the language was quick to adapt.

What occurred in Latvian was similar to English, as evidenced by the *Oxford Languages report Words of an Unprecedented Year*, 2020 brought an unprecedented sense of immediacy and urgency to the work of lexicographers. Yet what is exceptional in our own lived experience often has parallels in history: the English language is studded with words from previous plagues and pandemics, mass social disruption, and an abundance of expressions that fulfil humanity's perennial need to describe an often-inhospitable world. Though what was genuinely unprecedented this year was the hyper-speed at which the English-speaking world amassed a new collective vocabulary relating to the coronavirus, and how quickly it became, in many instances, a core part of the language (Words of an Unprecedented Year, 2020).

Did the pandemic news impact not only the media content, the commenters' attitude, and the mood of the society, but the Latvian language used in the comments as well? How were the new words integrated in conversations taking place in the digital environment focusing on current events? Did the growing verbal aggressiveness and emotional attitude towards pandemic news evidenced in the content of the comments during the pandemic (Eisele et al., 2021; Rožukalne, Kleinberga & Grūzītis, 2021) and marked with IIA manage to spark a more active, diverse, pandemic-related linguistic creativity among digital media users?

When evaluating the content of comments left by the news portal users, the following hypothesis was put forth for the purposes of this research: the events happening around the commenters serve as an impulse to also create new words to voice their opinion regarding various aspects of the pandemic in the comments. The

second hypothesis concerns the aggressiveness of users leaving comments on news items, as well as their application of swear words, discriminatory terms, and emotionally expressive words to voice their aggressiveness by making them part of their aggressive communication. We hypothesised that if the level of verbal aggressiveness in news media comments increases during a pandemic, then the proportion of words describing the pandemic also increases.

The main objective of this study is to find out if verbal aggressiveness of news commentators fosters COVID19 pandemic-related linguistic creativity.

When finding interrelations between the level of aggressiveness of commenters and the pandemic realities related words used in comments, the following research questions were proposed:

RQ. 1. How do COVID-19 pandemic-related word use affect commenters' levels of aggressiveness (quantitatively)?

RQ. 2. What linguistic creativity techniques characterize the pandemic-related words used in news site comments?

2. LITERATURE REVIEW

Our interdisciplinary research, which focuses on finding interrelations in the content of comments made by audience representatives, uses several theoretical frameworks. The behaviour of people commenting digital news is analysed as part of participatory culture and an opportunity to broaden media functions (Deuze et al., 2007; Jenkins, 2006), highlighting the changes in digital communication during crisis, including the global pandemic (Walby, 2021). In the context of this research verbal aggressiveness is viewed as communication characteristic to the digital public sphere (McDermott, 2018; Weber, 2014,) that permanently accompanies in digital media discussions on controversial issues and may reflect the mood of the society or its groups (Mutz & Soss, 1997; Naab et al., 2018) during a particular period. Commenting in our research is classified as one of the manifestations of audience activity (Spirodou, 2018; Weber, 2014), relating to content creation and defining one's attitude towards current events (Coe et al., 2014; Lee & Jae, 2010). In terms of evaluating the characteristics and mood of the communication (namely, aggressiveness in the context of our research), however, qualitative assessment of the usage of language and particular words is highly important.

Word-formation theory was used to interpret the data evaluated in the research from the linguistic point of view, analysing word-formation patterns. Attention was paid mostly to the syntactic word-formation pattern, as the analysed neologisms found in the comments are compounds, coined by using this word-formation pattern. In addition, the paper makes use of sociolinguistic findings concerning linguistic creativity during the times of crisis. Global shocks and events activate

the language system, as they lead to the creation of new words and constructions, demonstrating the flexibility and viability of language, as well as its capability to adapt to any circumstances (Strautmane & Lauga, 2021, February 11). The pandemic and the related socio-political crises urge the society to read and think more; therefore, special attention is paid to the organic ability of the language to react. Neologisms are considered as a good provocation that can prompt part of society not only to look for new words, but also express their opinion at the same time (Hirša, 2006), thus using their own opinion to actively shape public opinion.

2.1. Internet comments and the digital public sphere

Commenting on news and other information as an involvement of the audience in discussions on significant socio-political issues is one of the most important phenomena of mediated communication encountered by societies all over the world. In an online communication environment, commenting takes place almost simultaneously with the news publication. Comments are a way to express the audience's activity related to the received message or other members of the audience, and comments are a part of participatory culture (Deuze et al., 2007; Jenkins, 2006) which has changed the behaviour of media audience.

Among researchers, the various forms of audience participation in the digital environment are considered one of the most significant phenomena caused by the digitization of news. Audience involvement, immediate reaction to the content, the possibility to create both audience comment, and audience content (Kammer, 2013) has changed the relationship between the media and the audience, as it challenges the unidirectional (Rowe, 2015) information flow from sender to receiver and has largely been replaced by multi-directional information flow (Kammer, 2013). Although from the point of view of scholars, audience comments as a form of participation have always been seen as an opportunity to improve discussions on socially important issues, however, studies of the content and effects of comments show a contradictory picture, in which the authors of comments are characterized as those who do not represent society and whose incivility causes other participants to leave the discussion (Coe, Kenski & Rains, 2014), at the same time, the opportunity offered by digital technologies to participate in discussions is emphasized. Discussions and comments as a form of participation help the news to change the perception of media content and to see the issues represented by the media in a different perspective (Jahng, 2018; Thorson et al., 2010). Researchers emphasize that audience participation affects the editorial decisions of journalists, the other users as well, thus, in the evaluation of the media ecosystem, more attention is paid to the manifestations of "audience logic" (Schrøder, 2017).

Commenters react both anonymously and openly, and comment on all aspects related to news: the content, quality of journalism, other commenters' reactions, also the use of language. Comments help to quickly understand the interpretation

of a news story, they could be called as shortcuts between the content and opinion formation (Ruiz et al., 2011). Comments on news portals show both the attention devoted to news (Kalogeropoulos, 2017; Yang, 2008), and the topics most important for the audience, as well as the level of audience's participation (Juarez Miro, 2020; Massip et al., 2018).

The opportunities to react to media content have changed the power relationships between the media information and its receiver as it increases the audience's role in the public information creation process. Comments give millions of media users an opportunity to share their thoughts and express their personality (Barnes et al., 2018), give opinions and show emotions (Rožukalne, 2018), have fun (Spyridou, 2018), participate in discussions. Commenting helps the audience to interpret journalist-created content, establish their social identity, engage in 'gate watching' as opposed to journalist 'gatekeeping' as Aske Kammer (2013) has described the involvement in discussions or meta-discussions. Comment writing is impacted by the commenters' knowledge about the topic discussed in the news and their understanding of the opportunity to contribute to the specific discussion (Soffer, 2019).

Audience's comments broaden the functions of a medium and can develop discussions (Massip et al., 2018; Weber, 2013, 952) on issues important for the society. Giving news media users an opportunity to freely contribute to the thought exchange, online media comment environment characterizes the modern digital public sphere. It is somewhat similar to and different from Jürgen Habermas' (1989) public sphere definition where representatives of various groups of society meet and discuss socio-political issues with the aim to impact decision-making. In contrast to Habermas' public sphere (Rauchfleisch, 2017, Wohl-Jorgensen, 2019) digital public sphere is characterized as fragmented (Dahlberg, 2007), varied, heterogeneous in audience, content, and technological possibilities. It includes a larger number and greater variety of participants. Representatives of different groups interact in the digital public sphere; socially important and personal information mix, and their quality and audience's level of participation is determined by the development of technological tools (Ruiz, et al., 2011).

When discussing the structural transformation of the rational discussion-based public sphere, scholars emphasize digital public sphere openness and accessibility, characterised by decentralized communication, in which emotions and affective reactions play an increasingly important role (Wahl-Jorgensen, 2019), reducing the possibility of constructive discussion (Papacharissi, 2015). Recognizing the potential of the digital public sphere for society to get to know a wider spectrum of opinions and to give the opportunity to hear previously unknown voices (Bennett & Segeberg, 2012; Dahlgren, 2005), researchers have expressed doubts about the diversity of debates in the digital environment, because people can avoid opposing views. In addition, quality of discussions is limited by conflicts between discussion participants (Papacharissi, 2002), and verbal attacks, incivility and aggressive communication which may encourage potential discussants to avoid participating in the discussion.

2.2. Verbal aggressiveness in the digital environment

Shortly after the creation of commenting opportunities, the content and mood of the audience's comments led to revision of previous assumptions that Internet commenters would provide positive contribution in the discussion quality and variety, creating an environment fit for democratic exchange of thoughts. Audience expresses more and more verbal aggressiveness in the online discussions. Its participants want to react to news topics emotionally, often being unable to engage in rational discussion (Kalogeropoulos et al., 2017; McDermott, 2016; Nau, & Stewart, 2014). Instead, users and researchers encountered rudeness, aggression, impoliteness (Ksiazek et al., 2016; Luck & Nardi, 2019), disrespect, defamation, verbal attacks, incivility, discrimination of the people or groups of society mentioned in the news, and disregard to any known or environmentally defined behaviour norms (Coe, Kenski & Rains, 2014; Naab et al., 2018). These processes stalled involvement of more commenters and forced publishers to invest in comment editing, as well as set rules of self-regulation (Miller et al., 2016).

Verbal aggression can be defined as offensive, reproachful, discriminatory, and hateful remarks toward the news content, authors, or other commenters. Hate, discriminatory attitude, hate speech can be executed by expressing negative attitudes toward a topic, individual, or group of society. It can manifest itself in neutral language or in curse words. Verbal aggression is identified by disregard of politeness rules and norms, vulgarity (Naab et al. 2018; Wilhelm et al., 2020).

Verbal aggression can be caused by different values and ideological beliefs of individuals (Su et al., 2018, 3693). If digital media users discuss significant and controversial topics on which there are different views on the society, the aggression can increase.

The user anonymity provided in the online environment harms discussion quality as it diminishes the accountability of participants and increases impoliteness and rudeness. Anonymity creates alienation between the participants of the discussion (Kalogeropoulos et al., 2017; McDermott, 2016). Crisis situations, characterized by anxiety, anger, fear, increase the level of aggression in the digital environment (Rožukalne, 2018), they also contribute to the emergence of new words, as they help to describe the current situation and related feelings more accurately.

2.3. Overview of reasons for word-formation

It is in the lexicon where language changes are revealed most rapidly and most vividly. Society's reaction to insecurity, unexpected situations, sudden crises is firstly appearing in language, expressing its feelings, thoughts, opinions, confusion, or indignation. Emotionally charged situations often lack common and well-known words, thus, the new words and expressions are created (Liepa, 2011, Liepa, 2021).

In this process through linguistic creativity known lexical units are modified, new ones created, and means of existing synonymy are extended.

The usage of neologisms demonstrates previously untapped means of word-formation. The new words make the text livelier and more compelling, attract attention and demonstrate individuals' creative potential in solving communicative needs (Liepa, 2011; Saukāne, 2008).

For the purposes of our research, the definition of neologisms proposed by the linguist Ojārs Bušs (2013) has been chosen; its author stresses that in a narrower sense only those new words or recent borrowings that have been derived from forms existing in one's native language (in this case – Latvian lexical roots and stems) can be considered neologisms. In a broader sense, however, neologisms also include recent borrowings (Bušs, 2013).

In addition, our research includes potential neologisms that denote various stages of language development even more precisely. To define them, the definition of potential neologisms provided by the Latvian National Terminology Portal (n.d.) was used: a potential neologism is 'a recently coined neologism not yet part of the lexical system of a language that has the potential to become part of it [..].' (Latvijas Nacionālais terminoloģijas portāls, n.d.)

For the purposes of this article, neologisms coined during the COVID-19 pandemic have been analysed; for the most part, they are occasional words (Liepa, 2021). As stated by the Latvian National Terminology Portal, an occasional word (also a nonce word) is a 'new word coined mainly for stylistic purposes in the context of a specific literary text or a particular speech situation [..]. For the most part, occasional words are used only by their respective authors and do not become part of the lexical system of a language.' (Latvijas Nacionālais terminoloģijas portāls, n.d.)

3. RESEARCH METHODS AND DATA

To answer the research questions, put forth, data provided by the Index of the Internet Aggressiveness (IIA), a digital research tool developed at the Faculty of Communications of Rīga Stradiņš University (RSU) were used. The IIA was created for the purpose of analysing user aggressiveness on the Internet, and the aim of the research tool is to record the mood of society in the digital environment, assessing relationships between the content provided and the users' response. The structure of IIA is much broader in comparison to other tools designed for digital content research, as they in most cases reduce the obtained data to categories denoting neutrality, positivity, and negativity. IIA is based on software co-developed by the researchers of the Artificial Intelligence Laboratory of the University of Latvia. IIA is developed using language normalisation (Skadiņa et al., 2010; Garkāje, Zilgalve & Darģis, 2014; van der Goot, Rob & Çetinoğlu, 2020) and machine learning approach for computational analysis of audience comments, it codes and analyses comments left on the biggest news portals of Latvia, namely, delfi.lv, tvnet.lv un apollo.lv.

The mentioned news portals represent the development of digital mass media in Latvia. They were founded more than 20 years ago by technology companies who, wanting to attract a larger audience, developed digital websites as news portals and digital mass media (Rožukalne, 2013). They are the so-called digitally born media outlets, the development of which characterizes the unique situation that, unlike many other countries, legacy media in Latvia missed the transition to the digital environment. Therefore, the mentioned media have always been in the top 3 or top 5 of Latvian digital news media, they attract the largest audience and define the development of digital news media in Latvia, which is characterized by the media system of a small country (1.9 million inhabitants) and the linguistically divided audience of (35% of uses media in Russian) (MPM, 2022).

Three largest internet news sites are currently owned by two Estonian media corporations (delfi.lv is part of Ekspress Grupp, tvnet.lv and apollo.lv are owned by Eesti Media). According to Audience Gemius data (2022, February 15), in 2021 delfi.lv attracted more than 800,000 real users, tvnet.lv - 746,000 real users, apollo.lv - more than 599,000 real users. These media have also determined the development of Internet commenting culture, even creating the term "Delphi commenters", which means rude, uncivil, and aggressive behaviour of commenters. On Internet portals, comments are edited with the help of technology and by manually editing comments whose authors violate the law, e.g., call for violence, promote intolerance, subversion of state power or spread hate speech. Internet comments are also a fertile environment for spreading disinformation and propaganda of third countries, including the activities of Russian Internet trolls (Rožukalne & Sedlenieks, 2017).

To obtain data for the purposes of the IIA index, Rīga Stradiņš University has concluded the contracts with the media organisation, that they give access to the comments' data and encode it according to the goals of the researchers.

The analysis of the users' comments is based on several data groups: keywords, as well as their degree of aggressiveness or 'weight', meaning that words deemed to be very aggressive, averagely aggressive, and mildly aggressive. IIA data are divided into eleven categories: discriminatory words, swear words, words denoting injustice, words inciting violence, aggressive actions, personalities with symbolic links to aggression, associations with violence, aggressiveness related military terms, accusations, aggressiveness related emotions, betrayal. Aggressive words characterising COVID-19 that were selected after carrying out feasibility study of user comments were added to the IIA keyword corpus in September 2020 and classified as swear words.

The current IIA data set comprises around 25.18 million comments and around 1370 articles (Barometrs, 2022). IIA database makes it possible to search for various keywords, analyse their number, contexts and the relation to the news content, and the index makes it possible to determine the Top10 news items that received the most aggressive comments, as well as keywords that determine the aggressiveness level related to the news item.

The research covers two periods during which state of emergency was declared in Latvia due to the pandemic: from March 12, 2020, to June 10, 2020 (henceforth the 1st period) and from November 9, 2020, to April 6, 2021 (henceforth the 2nd period). Three data sets have been used in the research.

To contextualise the usage of pandemic related words and determine whether it is related to the overall level of aggressiveness of the news portal comments, the IIA data on the overall level of aggressiveness of portal users during both periods of state of emergency were compared. To shed light on the mood of the Latvian society, the following IIA quantitative data were used: the average level of aggressiveness throughout the period and each state of emergency period, the overall aggressiveness trend, and the trend according to keyword weights, as well as the number of IIA peaks during each period. To identify trends pertaining to the usage of COVID-19 related keywords and their possible impact on user aggressiveness in the comments, quantitative data pertaining to the use of each word were analysed. As IIA allows to determine the usage frequency of aggressive words included in the index pertaining to Top10 news, the following data have been used to analyse COVID-19 related keywords: baseline level of each COVID-19 related keyword, number of times each keyword has been used in relation to Top10 news (recorded in the corpus), number of news items related to Top 10 keywords.

The third data set consists of quantitative and qualitative analysis of the share of pandemic related neologisms in each period. Neologisms coined by portal users have been analysed and the respective word-formation model has been assessed using the IIA data.

All instances of usages with *kovid-* and *korona-* in the first part of the compound, as well as other frequently used words during the state of emergency (*vaccine*, *restrictions*, *pandemic*) have been analysed, applying qualitative content analysis to the IIA data.

This data set comprises pandemic related neologisms analysed by applying qualitative content analysis and determining which neologism word-formation model (syntactic, morphological, or syntactic-morphological) has proven to be the most productive in the comments.

Other elements of linguistic creativity, such as wordplay (phonetic deformations, rhymes) or occasional phraseological units were not included in this research. When assessing neologisms, a second aim was put forth, namely, to evaluate the emotional expressiveness of neologisms.

Pandemic related neologisms were systematised in two groups (qualitative content analysis). The first category included compounds with the word Covid (also Kovid – corresponding to the Latvian pronunciation), where the second component is a word belonging to common vocabulary (for example, *bed*, *hospital*, *section*, *patient*, *period* etc.), whereas the second category comprised words that, according to the marking denoted in the dictionary of common vocabulary (tezaurs.lv, n.d.), have stylistic expressivity. According to the definition of emotional expressivity provided by the Latvian National Terminology Portal (Latvijas Nacionālais terminoloģijas

portāls, n.d.), emotional expressivity in the context of this research is "the expressiveness added to a language unit (a word, a morpheme, a word form, a phraseological unit, a sentence) by an emotional connotation. Stylistic and emotional expressiveness taken together form additional information" (Latvijas Nacionālais terminoloģijas portāls, n.d.).

4. RESEARCH RESULTS

4.1. Level of aggressiveness in news site comments and quantitative use of Covid-19- related words in comments in the 1st and 2nd period of the study

As evidenced by IIA quantitative data (Table 1), the level of verbal aggression during nearly the entire first stage of the pandemic (3.4) is lower than the level on average (3.5). The trend data demonstrate that there were individual peaks of verbal aggression in the first weeks of May and June 2020. However, periods of markedly low level of aggression are much longer. The curve of keyword weight shows that users use mainly mildly or averagely aggressive words (value: 1.9–2.75).

The average level of aggression during the second period of research (Table 1) has increased (3.6), whereas trend data curves show that the aggressiveness during this period mostly exceeded the average value (3.5). Evaluating the trends by keyword weights allows us to conclude that verbal aggressiveness during the 2nd period was stable throughout and mostly mildly or averagely aggressive words were used in the comments (average value: 2–2.5); it corresponds to the average level of two years.

Table 1: General verbal aggressiveness level (1st period and 2nd period). Source: IIA data.

Data	1st period	2nd period	Average level (Jan 2020 – Dec 2021)
Average value of commenters' aggressiveness	3.4	3.6	3.5
Number of peaks, according to trendline (per date)	15	34	-
Trend based on keyword weights	1.9–3.75	2–2.5	1.9 – 2.7

The quantitative data of the IIA peaks shows that there were 15 peaks during the 1st period (3 months), whereas during the 2nd period (5 months) the number of peaks reached 34. During the first period of the pandemic there were individual events that caused short-term (April, May, June) spikes of news portal user aggressiveness; however, when looking at the 2nd period, two things have to be taken into account: firstly, the overall level of aggressiveness was higher, exceeding the average level for a longer period of time, and, secondly, the stable usage of averagely aggressive words in the comments allows to draw a conclusion of the stability of the total level of aggressiveness, i.e. the aggressive sentiment present in the society.

The analysis of aggressive comments left on news items during 10 peaks of each period reveals that in the 1st period 39% of IIA keywords were COVID-19 related, and in the second period the number increased to 47%, meaning that an increase in the level of aggressiveness also leads to an increase of the number of aggressive keywords, as well as the weight of aggression of the words used in the comments.

Quantitative analysis of COVID-19 related keywords (Table 2) (14 new keywords were added to the IIA) reveals similar trends: during the 1st period (Table 2), the usage frequency of each keyword was low, and several words were not identified in the comments. The analysis of the comments on Top10 news items showed that that the words used most often were variants of "covidiot" (90 times) and "covidphobe" (7 times); both express judgement of other people, based on their attitude towards the pandemic. During this period, 82 comments featured dismissive words denoting COVID-19 ("coronaflu" and "coronavirus"); they were used to ridicule the seriousness of the new disease. The commenters used COVID-19 related keywords; however, their usage rate was low in comparison to other words used for expressing aggressiveness (the aggressiveness index does not exceed 1; for most of the words, the baseline level ranges from 0.1 to 0.29). When assessing the proportion of Covid-19 related keywords in the Top 10 most commented news, it can be concluded that these words were used in only one third of the Top10 news selected by the IIA.

Table 2: Analysis of Covid-19 related keywords of IIA in 1st period. Source: IIA data.

Word (Latvian)	Word (English)	Baseline level	Number of uses in comments (various forms) from Top 10	Number of news pieces from Top 10
kovidiots	covidiot 1	0.262	21	10
covidiots	covidiot 2	0.641	139	10
covididiots	covididiot 3	0.368	30	10
covidfobs	covidphobe	0.355	7	4
covidhistērija	covidhysteria	0.11	1	1
covididiotija	covididiotism	0.25	2	1
kovidisms	covidism	0	0	0
kovidmenedžeris	covidmanager	0	0	0
kovidmenedžments	covidmanagement	0	0	0
kovidnieks	covid (vulgar)	0.296	36	10
kovidticīgs	covid believer	0	0	0
kovidšovs	covidshow	0.44	3	2
kroņgripa	coronaflu	0.19	2	1
kroņvīruss	coronavirus	0.275	46	10
Total			**287**	**59**

The situation analysed in the second period of research has changed (Table 3), as words related to COVID-19 have been used to comment Top10 news 5.6 times more often (1634 instances in total). In addition, their baseline level has increased several times as well: it varies on average from 0.3 to 0.94. Although the same words from the keywords list have been used, the usage rate is significantly higher and the context – significantly more aggressive: a form of "covidiot" has been used 1176 times in total, accounting for 72% of Covid-19 related word uses. During this period, "kovidnieks", a vulgar word denoting the virus was used often (221 times); it was used to belittle the dangerous nature of the virus. "Covidshow", which was used only 3 times during the first period, was used 44 times in the second one to denote the anger caused by the pandemic prevention process. The usage of the word "covidphobe" saw a significant increase (63 times as opposed to 7 times during the 1st period); it was used to mock other commenters or people featured on the news who took the danger posed by the virus seriously. The word "covidhysteria" (used to portray the fight against the pandemic as overblown) saw a similar increase (26 times in comparison to a single case during the first period). When evaluating these words in the context of Top10 news, it becomes clear that it is possible to find a COVID-19 related IIA keyword in the comments of nearly every most commented news item. However, the word "covidflu", a characteristic feature of the comments of the first period, was completely absent during the second period.

Table 3: Analysis of COVID-19 related keywords of IIA in 2nd period. Source: IIA data.

Word (Latvian)	Word (English)	Baseline level	Number of uses in comments (various forms) from Top 10	Number of news pieces from Top 10
kovidiots	covidiot 1	0.944	665	10
covidiots	covidiot2	0.603	380	10
covididiots	covididiot 3	0.342	131	10
covidfobs	covidphobe	0.312	63	10
covidhistērija	covidhysteria	0.23	26	10
covididiotija	covididiotism	0.1	1	1
kovidisms	covidism	0.22	2	2
kovidmenedžeris	covidmanager	0	0	0
kovidmenedžments	covidmanagement	0	0	0
kovidnieks	covid (vulgar)	0.396	221	10
kovidticīgs	covid believer	0.216	5	5
kovidšovs	covidshow	0.32	96	10
kroņgripa	coronaflu	0	0	0
kroņvīruss	coronavirus	0.378	44	10
Total			**1634**	**88**

4.2. Quantitative and qualitative analysis of COVID-19 related linguistic neologisms

For the purposes of researching neologisms during both periods of state of emergency in Latvia, the same keywords were chosen, namely, *kovid*, *korona* (also *covid*, *corona*), *vaccine*, *restrictions*, as well as related neologisms – compounds. These words were searched for in the whole corpus of comments left during the specified period; therefore, the data differs from that obtained by qualitative analysis of COVID-19 related keywords added to the IIA aggressive keywords list, meaning that the words analysed further may not be aggressive.

To systematise the selected neologisms, they were counted according to both periods, specifying the number of usage instances, as well as the total number of comments. Afterwards, words used in the first and the second instance of state of emergency were divided into two groups:

- stylistically neutral words that describe the disease, state of emergency, sufferers.
- stylistically expressive word formatives, where the second component has a humorous, ironic, or sarcastic shade of meaning, including words with a deliberately negative connotation.

The emotionally expressive category includes neologisms containing slang (including vulgarisms) as well; they have been marked with an * in the tables presented in the Annexes.

The first research period is shown in Table 4 (detailed data in Annex 1–4): these are words containing *covid-* (*kovid-*), *corona* (also *korona*), *vaccine*, *restrictions*. However, the last two words have not been used in neologisms, as they have more syllables, making it more difficult to fit them in a compound. Moreover, vaccines were not yet available during the first state of emergency, leading to a smaller number of uses.

As evidenced by the table, the second period of research features an increase of neologisms with *covid-* (*kovid-*). During this period, the translation (*kroņa-*) of corona (*korona*) in Latvian was also featured more prominently, for example, *coronavirus*, *coronapandemic*.

The word *vaccine* was not used in coining neologisms; however, it was used in one type of wordplay, namely, in a phonetic deformation. These examples include the words *fakcīna* (6 uses in 6 comments – the English word *fuck* has been used) and *kakcīna* (1 case; the Latvian vulgarism *kaka* has been used in this instance).

The word 'restrictions' was not used to create neologisms in comments.

Table 4: Quantitative data on linguistic creativity. Source: IIA data.

Period of study		Number of words used	Number of users' comments
1st period	words that include "Covid-" (of which kovidiots(i) 7)	354	315
	words that include "corona- "	984	910
	Words that include "vaccine"	827	728
	ierobežojumi (*restrictions*)	1027	961
2nd period	words that include "Covid-" (of which kovidiots(i) 306)	2075	1710
	words that include "corona- "	490	374
	Translation of *corona* into Latvian ("kroņa")	33	28
	Words that include "vaccine"	5474	4767
	ierobežojumi (*restrictions*)	3536	3246

After performing quantitative data analysis, stylistically neutral and stylistically expressive neologisms were systematised using qualitative content analysis (Table 5).

The words describing sufferers and the disease itself are stylistically neutral: *kovidslimnieki (covid sufferers), kovidpacienti (covid patients), kovidupuri (covid victims), kovidpalāta (covid ward), kovidārstēšana (covid treatment), kovidkomplikācijas (covid complications), kovidpandēmija (covid pandemic)* etc. These word formatives are stylistically neutral, as the second component of the compound is part of the common vocabulary (*pacienti* 'patients', *testi* 'tests', *skaitļi* 'numbers)' *pandēmija* 'pandemic' etc.), without any shade of emotionally expressive meaning.

Word formatives indicative of the author's attitude are stylistically expressive. Although some of them feature a word belonging to the common vocabulary as the second component (*propaganda* 'propaganda', *spēles* 'games', *pabalsts* 'benefit', *problēma* 'problem', *ēna* 'shadow', *noliedzēji* 'deniers' etc.), the combination with the international word covid- denoting the virus made the neologism take on an entirely new shade of meaning, along with a turn of thought that is, in a sense, paradoxical and metaphorical.

The following words have not been included in the list of index keywords, although they fit the requirements of the IIA: swear words, discriminatory words, words describing violence.

All neologisms recorded during the first state of emergency (61) are compounds, coined by applying the syntactic word-formation pattern. In addition, they show another important trend: the first component of all the recorded compounds contains an element of international origin (*kovid-*, *korona-*).

The second state of emergency is longer in terms of time, as well as more abundant and varied in terms of new lexemes; one commenter termed this time *kovidmaratons* 'covidmarathon'.

The word *infodēmija* 'infodemic' (*informācija* 'information' + *pandēmija* 'pandemic'), hardly used before, emerged during this period. Three comments featuring four instances of this word were identified; they are not given an individual entry in the table. The usage of 'infodemic' is related to flow of false information concerning COVID-19 (WHO, 2020, February 11).

This period features a relatively large number of emotionally expressive neologisms, including those that conform to the IIA; the process is fuelled by the society splitting into two irreconcilable groups.

The compound *koviddauneļi* (attributing Down syndrome to someone), emerging during this period, deserves to be highlighted, as it is the only compound in our research that has been coined using the syntactic-morphological word-formation pattern.

Table 5: Structure of compounds in the 1st and 2nd study period. Source: IIA data.

Period of study	Compounds (total)	*Of which*	
		stylistically neutral	stylistically expressive
1st period	61	28	33
Compounds with covid-	34	17	17
Compounds with corona-	27	11	16
2nd period	195	47	148
Compounds with covid-	165	39	126
Compounds with corona-	30	8	22

Individual neologisms identified in the research have been included as occasional phraseologisms not deemed to be aggressive, ironic (in a negative sense) or sarcastic. They feature wordplay that makes use of surnames of politicians.

Unfortunately, during this period vulgar neologisms that fit the IIA emerged as well. This group includes swear words, discriminatory words, as well as words describing violence: *kovidmēsli* 'covidcrap', *kovidfufelis* 'covidsham', *kovidsūdi* 'covidshit', *kovidhuiņa* 'coronadickery', *kovidhujovid* 'covidfuckovid', *kovidfigņa* 'covidbull', *koronajobanā* 'coronafuckery', etc.

During this period, neologisms (compounds) with the component *kroņ-* emerged as well, with *kroņ-* being a translation of "corona" into Latvian (*kronis*).

In addition, during this period the word *pandēmija* 'pandemic' (also *kovidpandēmija* and *covidpandēmija* or *Covid pandemic*) was recorded as well, amounting to 9 uses in 8 comments. *Pandemic* was also included in phonetic transformations, for example, *pandēmija – šmandēmija*; also, plāndēmija 'plandemic' (20 uses in 18 comments) and *kovidplāndēmija* (wordplay, phonetic transformation, epenthesis); however, the analysis of phonetic deformations is beyond the scope of this research.

There are also blends, coined using "blending" two words together; for example, 10 comments feature *panikadēmija* (panic + pandemic = panicdemic); also, *fufeldēmija*

(fufelis (a trifle; sham) + pandēmija = fufeldēmija); *pornodēmija* (pornography + pandemic = pornodemic).

Linguist Andrejs Veisbergs describes blending thus: "Blending is yet rare in Latvian and seems to be an imported word-formation pattern. Apart from a few blends which have gained ground in the language, there are relatively many occasional blends which testify to the gradual growth of importance of this word-formation pattern" (Veisbergs, 1997, p. 282).

5. CONCLUSIONS AND DISCUSSION

The aim of this research was to study the link between the level of verbal aggressiveness present in the comments left on the biggest news portals in Latvia and the linguistic creativity in the context of pandemic related words. Moreover, we went one step beyond, analysing the impact of neologisms on the mood of active commenters operating in the digital environment, in the context of our research – the level of aggressiveness of internet news portal users.

Answers to research questions:

RQ 1. How does COVID-19 pandemic-related word usage affect commenters' levels of aggressiveness (quantitatively)?

The level of aggressiveness of the users of the biggest news portals, as well as several aggressiveness indicators grew slightly during the pandemic. Quantitative analysis of COVID-19 related keywords selected from the IIA demonstrates that the usage of popular words ("covididiot", covidhysteria", "covidshow" etc.) gradually increases during the pandemic. During the 1st research period, the words were featured in comments; however, their use did not significantly impact the IIA level. The keywords were used significantly more to comment news on COVID-19 during the 2nd period of research, yet the quantitative data analysis their usage in the total content of comments did not lead to a significant increase in aggression, meaning that, in comparison to other aggressive keywords, they were used less frequently. Their impact on the IIA is insignificant (less than a third); in other words, the average level of aggressiveness is determined by other words with a higher usage frequency and overall aggressiveness, for example, words that incite violence towards officials or other people.

Based on the frequency of word usage, the quantitative data relating to COVID-19 related neologisms grew during the 2nd period of state of emergency.

Therefore, it can be concluded that COVID-19 related keywords and other neologisms are used and created on a continuous basis and news portal commenters on the Internet use them to express their attitude (Igartua, Ortega-Mohedano & Arcila-Calderón, 2020; Ruiz et al., 2011), including emotional reaction (Wahl-Jorgensen, 2019) towards pandemic related events. Commenters made use of these words to

voice their aggression as well; however, they did not serve as a substitute to other words that are used to express verbal aggressiveness significantly more often and more ardently, meaning that words used during the time of a crises influenced but did not determine the level of aggressiveness of commenters during both states of emergency during the pandemic. Our data shows that while the crisis has an impact on the level of aggressiveness of commenters, the existing nature of communication on the Internet remains important.

Our data characterise the homogeneity and one-sidedness of the discussion in the digital environment, as negative attitudes are cultivated in the comments of the pandemic news with the help of the same words. The conclusions on content of aggressive communication and the increase in aggressiveness when the pandemic situation becomes more complicated in news representation is in line with the opinion of sceptics of the digital public sphere that it is difficult to apply a deliberative perspective to online discussions (Papacharissi, 2002; Papacharissi, 2015).

Another significant conclusion arising from quantitative analysis concerns word usage. COVID-19 related words are mostly swear-words and thus are used to voice commenters' anger and resentment when reacting to events of the pandemic. They undoubtedly serve a prominent function in digital discussions, allowing one to express one's opinion on COVID-19 related news content more clearly.

The word *kovidioti* 'covidiots' was used already in early March 2020 in the United Kingdom, the US, and other places to refer to the panicked shoppers hoarding toilet paper and pasta. After a state of emergency was declared in Latvia, this word was also used to refer to people ignoring the recommendation to stay at home; later it also included conspiracy theorists (regarding the origins of the virus) and people agitating against COVID-19 vaccines when they would be available (*Do you speak corona? A guide to covid-19 slang 2020*).

Using news readers' comments, the second order media effect in this study can be explained due to comments' content that manifested growing aversion to the content of pandemic news and the use of similar words to express and strengthen negative attitudes towards, firstly, pandemic news, and secondly, the pandemic. The proportion of "covidiot" and other words recorded in the IIA data allows to conclude that rude and aggressive communication has been dominating in the Latvian digital public sphere. New words and their usage frequency and dynamics also characterise commenters' mood shifts; however, they are not impactful enough to significantly change the mood and content of the comments over a longer period. Therefore, it can be stated that our data reflect the volatility, fragmentary nature, and presence of emotional assessment in the discussions on COVID-19 related news.

RQ 2. What linguistic creativity techniques characterize the pandemic-related words used in news site comments?

Our research allows us to conclude that the syntactic word-formation pattern was

the most productive during pandemic. It is easily explained: it is quite easy to use, being a flexible means of combining even seemingly incompatible roots into one word. The number of compounds recorded in both periods is soundproof: only one compound was coined by applying the syntactic-morphological word formation pattern, and there were no examples of neologisms using the morphological word-formation pattern.

Compound creation as a productive means of coinage in the literary language was noted already in the 1980s (Bušs, 1982). Modern research concerning the Czech language also confirm it; for example, M. Škrabal and M. Kavka (2021) note that: "As regards truly new lexemes, the simplest way is to create a compound with the first component *korona-* or its truncated version *koro-* (altogether approximately 42% of new entries)" (Škrabal & Kavka, 2021).

When assessing the expressivity of compounds, it can be concluded that the stylistically expressive compounds have a slight edge in the 1st period, while in the 2nd period the expressivity increases along with the news commenters' aggressiveness. Some of the words used confirm the aggressiveness criteria; however, they are few and are mostly a feature of individual participants' communication instead of being widespread throughout the comment corpus. Several neologisms could be considered as metaphors; however, as metaphor identification and analysis were not the objectives of this research, the identified transfers of meaning are unexpected research finding. Metaphor formation during the times of pandemic is promoted by the rich information background. During the 2nd period other types of linguistic creativity, such as wordplay, occasionally modified phraseological units, and proverbs, emerged as well; however, these categories have not been analysed in the article.

The evaluation of COVID-19-time neologisms allows us to conclude that, for the most part, they are occasional words created by individual authors and are highly unlikely to become part of the lexical system.

Our data are consistent with other findings concerning linguistic creativity during the time of the pandemic. Researchers M. Škrabal and M. Kavka (2021), pointed out that it is difficult to predict which of the deluge of new words will become permanently entrenched in the language and which will not. They called the lexicon as the most dynamic level of language, which is like a mycelium for linguistic change, where new words are being recorded to an unprecedented extent (Škrabal & Kavka, 2021). Linguist David Crystal (2020) characterises linguistic creativity in the English language by emphasising that "the basic vocabulary of the virus – social distancing, lockdown, Corona, and so on [..] – has been used ludically to generate a wide range of playful, yet often pointed, expressions". He mentions the new abbreviations, such as BC (Before Covid) and WFH (working from home) and the influence of Brexit which has been usable to create words 'covexit' and 'locksit'. Crystal admits that most of the neologisms are blends – the combination of parts of two old words to make a new one (Crystal, 2020). He has highlighted humour as a means of linguistic expression as ability to laugh "in the face of the enemy" (Crystal, 2020). Our study

data identifies what the other researchers point to a different mood, as evidenced by language changes, that the difficulties of a pandemic in certain groups of society are manifested in verbal aggression tactics expressed in the form of incivility integrated in toxic language (Pascual-Ferrá et al., 2021).

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REFERENCES:

Barnes, R., Mahar, D., Cockshaw, W., & Wong, I. (2018). Personality and online news commenting behaviours: uncovering the characteristics of those below the line. *Media International Australia, 169*(1), 117–130. https://doi.org/10.1177/1329878X18798695

Bennett, W. L., & Segerberg, A. (2012). The Logic of Connective Action. *Information, Communication& Society, 15*(5), 739–768. DOI: 10.1080/1369118X.2012.670661

Broersma, M. (2019). Audience Engagement. In T. P. Vos & F.Hanusch (General Editors), D. Dimitrakopoulou, M. Geertsema-Sligh & A. Sehl (Associate Editors), *The International Encyclopedia of Journalism Studies* (pp. 1-6). John Wiley & Sons, Inc. DOI: 10.1002/9781118841570.iejs0060

Bušs, O. (1982). Jaunvārdi nesaistītā valodā rakstītos tekstos [New words in texts written in an unconnected language]. *Latviešu valodas kultūras jautājumi, 17*, 85–95.

Bušs, O. (2013). Latviešu valodas leksika [Latvian language lexicon]. In A. Veisbergs (Ed.), *Latviešu valoda* (pp. 133–156). Riga, Latvia: University of Latvia Press.

Coe, K., Kenski, K., & Rains, S. A. (2014). Online and uncivil? Patterns and determinants of incivility in newspaper website comments. *Journal of Communication, 64*, 658-679. doi:10.1111/jcom.12104

Crystal, D. (2021, May 20). *Covocabulary*. Cambridge University Press. https://www.cambridgeblog.org/2020/05/covocabulary/

Dahlberg, L. (2007). Rethinking the fragmentation of the cyberpublic: from consensus to contestation. *New Media & Society, 9*(5), 827–847. doi:10.1177/1461444807081228

Dahlgren, P. (2005). The Internet, Public Spheres, and Political Communication: Dispersion and Deliberation. *Political Communication, 22*(2), 147-162.

Deksne, D. (2019). Chat Language Normalisation using Machine Learning Methods. In *Proceedings of the 11th International Conference on Agents and Artificial Intelligence - Volume 2: NLPinAI*, ISBN 978-989-758-350-6; ISSN 2184-433X, pp. 965-972. DOI: 10.5220/0007693509650972

Deuze, M., Bruns, A., & Neuberger, C. (2007). Preparing for an age of participatory news. *Journalism Practice, 1*, 322-338. doi:10.1080/17512780701504864

Deuze, M. (2020). The role of media and mass communication theory in global pandemic. *Communication Today, 11*(2), 4 -16.

Eisele, O., Litvyak, O., Brändle, V.K., Balluff, P., Fischeneder, A., Sotirakou, C. Ali, P.S., & Boomgaarden, H. G. (2021). An Emotional Rally: Exploring Commenters' Responses to Online News Coverage of the COVID-19 Crisis in Austria, *Digital Journalism*. DOI: 10.1080/21670811.2021.2004552

Garkaje, G., Zilgalve, E., & Dargis, R. (2014). Normalization and automatized sentiment analysis of contemporary online Latvian Language. *Human Language Technologies - The Baltic Perspective*, *IOS Press*, 268. doi:10.3233/978-1-61499-442-8-83

Gemius Latvia. (2022, February 15). TOP 10 ziņu mediju interneta vietnes 2021.gadā [TOP 10 of internet news sites in 2021]. https://www.gemius.lv/all-reader-news/top-10-zinu-mediju-interneta-vietnes-2021gada.html

van der Goot, R., & Çetinoğlu, Ö. (2020). Lexical Normalization for Code-switched Data and its Effect on POS-tagging. *ArXiv*, https://doi.org/10.48550/arxiv.2006.01175

Habermas, J. (1989). *The Structural Transformation of the Public Sphere*. Cambridge, Massachussetts: The MIT Press.

Hirša, Dz. (2006). Jaunvārds kā sabiedrības lingvistiskās kompetences rādītājs jeb Garainis, kas veicina vārīšanos [New word as an indicator of the linguistic competence of the society, or Steam that contributes to the boiling]. *Linguistica Lettica, 15*, 236–243.

Igartua, J-J., Ortega-Mohedano, F., & Arcila-Calderón, C. (2020). Communication use in the times of the coronavirus. A cross-cultural study. *El profesional de la información, 29*(3), e290318. https://doi.org/10.3145/epi.2020.may.18

Interneta agresivitātes indekss [The Index of the Internet Aggressiveness]. (n.d.). https: barometrs.korpuss.lv

Jahng, M. R. (2018). From reading comments to seeking news: Exposure to disagreements from online comments and the need for opinion-challenging news. *Journal of Information Technology & Politics, 15*(2), 142–154.

Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide*. New York, US: New York University Press.

Juarez Miro, C. (2020). The comment gap: Affective publics and gatekeeping in The New York Times' comment sections. *Journalism*. https://doi.org/10.1177/1464884920933754

Kalogeropoulos, A., Negredo, S., Picone, I., & Nielsen, R. K. (2017). Who Shares and Comments on News? A Cross-National Comparative Analysis of Online and Social Media Participation. *Social Media + Society*. https://doi.org/10.1177/2056305117735754

Kammer, A. (2013). Audience Participation in the Production of Online News: Towards a Typology. *Nordicom Review, 34*, 113-126.

Kim, S.J., Wang, X., & Malthouse, E C. (2021). Digital News Readership and Subscription in the United States during COVID-19: A Longitudinal Analysis of Clickstream and Subscription Data from a Local News Site. *Digital Journalism*. DOI: 10.1080/21670811.2021.1984972

Ksiazek, T. B., Peer, L., & Lessard, K. (2016). User engagement with online news: Conceptualizing interactivity and exploring the relationship between online news videos and user comments. *New Media & Society, 18*(3), 502–520. https://doi.org/10.1177/1461444814545073

Latvijas Fakti. (2021). Pētījums par Latvijas iedzīvotāju mediju satura lietošanas paradumiem un sabiedrības vajadzībām [A study of the Latvian population use of media content habits and society needs]. https://www.neplp.lv/lv/media/185/download

Latvijas Nacionālais terminoloģijas portāls (2021). https://termini.gov.lv/

Latvijas Nacionālais terminoloģijas portāls. (n.d.). Potenciālisms [Potentialisms]. https://termini.gov.lv/atrast/potenci%C4%81lisms

Latvijas Nacionālais terminoloģijas portāls. (n.d.). Okazionālisms [Occasionalism]. https://termini.gov.lv/atrast/okazion%C4%81lisms

Latvijas Nacionālais terminoloģijas portāls. (n.d.). Emocionālā ekspresivitāte [Emotional Expresiveness]. https://termini.gov.lv/atrast/emocion%C4%81l%C4%81%20ekspresivit%C4%81te

Liepa, D. (2011). *Latvijas preses valoda* [Language of Latvian Press]. Rīga, Latvia: Latvian Language Institute of the University of Latvia.

Liepa, D. (2021). Sabiedrības lingvistiskā jaunrade Covid 19 pandēmijas laikā: valodas izteiksmes līdzekļu raksturojums [Linguistic creativity of society during the Covid 19 pandemic: characteristics of means of language expression]. Valoda dažādu kultūru kontekstā. *XXXI Zinātnisko rakstu krājums*, 158–167.

Lee, E.-J., & Jae, Y. (2010). What Do Others' Reactions to News on Internet Portal Sites Tell Us? Effects of Presentation Format and Readers' Need for Cognition on

Reality Perception. *Communication Research, 37*(6), 825- 846. https://doi.org/10.1177/0093650210376189

Luck, J., & Nardi, C. (2019). Incivility in user comments on online news articles: Investigating the role of opinion dissonance for the effects of incivility on attitudes, emotions and the willingness to participate. *Studies in Communication and Media, 8*(3), 3011 – 337. DOI:10.5771/2192-4007-2019-3-311

Masip, P., Suau-Martínez, J., & Ruiz-Caballero, C. (2018). Questioning the Selective Exposure to News: Understanding the Impact of Social Networks on Political News Consumption. *American Behavioral Scientist, 62*(3), 300–319. https://doi.org/10.1177/0002764217708586

McDermott, L. (2018). Online news comments as a public sphere forum: Deliberations on Canadian children's physical activity habits. *International Review for the Sociology of Sport, 53*(2), 173-196.

Miller, D., Costa, E., Haynes, N., McDonald, T., Nicolescu, R., Sinanan, J., Spyer, J., & Venkatraman, Sh. (2016). *How the World Changed Social Media*. London, GB: UCL Press. DOI: 10.14324/111.9781910634493

Mutz, D.C., & Soss, J. (1997). Reading public opinion: The influence of news coverage on perceptions of public sentiment. *Public Opinion Quarterly, 6*, 431-451.

Media Pluralism Monitor (MPM). (2022). *MPM Results 2022*. https://cmpf.eui.eu/mpm2022-results/

Naab, T. K., Kalch, A., & Meitz, T. G. (2018). Flagging uncivil user comments: Effects of intervention information, type of victim, and response comments on bystander behaviour. *New Media & Society, 20*(2), 777–795. https://doi.org/10.1177/1461444816670923

Nau, C., & Stewart, C. O. (2014). Effects of Verbal Aggression and Party Identification Bias on Perceptions of Political Speakers. *Journal of Language and Social Psychology, 33*(5), 526–536. https://doi.org/10.1177/0261927X13512486

Papacharissi, Z. (2002). The virtual sphere: the internet as a public sphere. *New Media and Society, 4*(1), 9-27.

Papacharissi, Z. (2004). Democracy online: Civility, politeness, and the democratic potential of online political discussion groups. *New Media & Society, 6*, 259-283. doi:10.1177/1461444804041444

Papacharissi, Z. (2015). *Affective publics: Sentiment, technology, and politics*. Oxford, UK: Oxford University Press.

Pascual-Ferrá, P., Alperstein, N., Barnett, D. J., & Rimal, R. N. (2021). Toxicity and verbal aggression on social media: Polarized discourse on wearing face masks during the COVID-19 pandemic. *Big Data and Society, 8*(1). https://doi.org/10.1177/20539517211023533

Rauchfleisch, A. (2017). The public sphere as an essentially contested concept: A co-citation analysis of the last 20 years of public sphere research. *Communication and the Public, 2*(1), 3–18. https://doi.org/10.1177/2057047317691054

Rožukalne, A. (2013). L*atvia's Media Owners. A monograph on Latvia's media system and most important owners thereof*. E-book. Rīga, Latvia: Apgads "Zinatne".

Rožukalne, A., & Sedlenieks, K. (2017). The elusive cyber beasts: How to identify the communication of pro-Russian hybrid trolls in Latvia's internet news sites? *Central European Journal of Communication, 10*(1), 79-97. https://doi.org/10.19195/1899-5101.10.1(18).6

Rožukalne, A. (2018). Aggressive memories or aggressiveness that changes memories? An analysis of audience reaction to news stories on significant historical events using data from the Index of Aggressiveness. In D. Hanovs & I. Gubenko (Eds.), *Memory - access denied? Political landscapes of memory and inclusion in contemporary Europe* (pp. 117-140). Riga, Latvia: Zinātne.

Rožukalne, A., Kleinberga, V., & Grūzītis, N. (2021). COVID-19 news and audience aggressiveness: Analysis of news content and audience reaction during the state of emergency in Latvia (2020 – 2021). *Environment. Technology. Resources. Proceedings of the 13th International Scientific and Practical Conference*, June 17 – 18, 2021, 2, 141 – 147. http://journals.rta.lv/index.php/ETR/issue/view/163/showToc

Rowe, I. (2015). Deliberation 2.0: Comparing the deliberative quality of online news user comments across platforms. *Journal of Broadcasting & Electronic Media, 59*(4), 539–555.

Ruiz, C., Domingo, D., Micó, J. L., Díaz-Noci, J., Meso, K., & Masip, P. (2011). Public Sphere 2.0? The Democratic Qualities of Citizen Debates in Online Newspapers. *The International Journal of Press/Politics, 16*(4), 463–487. https://doi.org/10.1177/1940161211415849

Saukāne, I. (2008). Dažas okazionālu adjektīvu iezīmes [Some features of occasional adjectives]. Vārds un tā pētīšanas aspekti. *Rakstu krājums, 12*(1), 269–279.

Schrøder, K.C. (2017). Towards the "Audiencization" of Mediatization Research? Audience Dynamics as Co-Constitutive of Mediatization Processes. In: O. Driessens, G. Bolin, A. Hepp & S.Hjarvard (Eds.), *Dynamics of Mediatization: Institutional Change and Everyday Transformations in a Digital Age* (pp. 85–115). Cham: Palgrave Macmillan.

Skadiņa, I., Auziņa, I., Grūzītis, N., Levane-Petrova, K., Nešpore, G., Skadiņš, R., & Vasiļjevs, A. (2010). Valodu resursi un tehnoloģijas humanitārajām zinātnēm Latvijā (2004 –2010) [Language resources and technologies for humanities in Latvia (2004-2010)]. *Ceturtās starptautiskās konferences Baltic HLT 2010, IOS Press, Frontiers in Artificial Intelligence and Applications, 219*, 15 –22.

Skaties.lv/Leta. (2021, November 18). Latvijā līdz 15. novembrim tiks noteikts stingrs "lokdauns", atgriezīsies arī komandantstunda [A strict "lockdown" will be set in Latvia by November 15, and the curfew will return]. *Skaties*. https://zinas.tv3.lv/latvija/latvija-lidz-15-novembrim-tiks-noteikts-stingrs-lokdauns-atgriezisies-ari-komandantstunda/?skaties

Soffer, O. (2019). Assessing the climate of public opinion in the user comments era: A new epistemology. *Journalism, 20*(6), 772–787. https://doi.org/10.1177/1464884917714938

Spyridou, L. (2018). Analyzing the active audience: Reluctant, reactive, fearful, or lazy? Forms and motives of participation in mainstream journalism. *Journalism, 20*, 827 - 847.

SPKC. (2020, December 12). Aktualitātes par Covid – 19 [News on Covid – 19]. https://www.spkc.gov.lv/lv/aktualitates-par-covid-19

SPKC. (2021, February 2). Covid-19 statistika [Statistics of Covid – 19]. https://www.spkc.gov.lv/lv/covid-19-statistika

Strautmane, I., & Lauga, S. (2021, February 11). I. Druviete: Covid laiks valodā atspoguļojies jūtami un parāda, ka valodas gars ir dzīvs. [I. Druviete: The time of Covid has been reflected in the language and shows that the spirit of the language is alive.]. *Latvian Radio*. https://lr1.lsm.lv/lv/raksts/kulturas-rondo/ina-druviete-covid-laiks-valoda-atspogulojies-jutami-un-parada-k.a140039/

Su, L. Y.-F., Xenos, M. A., Rose, K. M., Wirz, C., Scheufele, D. A., & Brossard, D. (2018). Uncivil and personal? Comparing patterns of incivility in comments on the Facebook pages of news outlets. *New Media & Society, 20*(10), 3678–3699. https://doi.org/10.1177/1461444818757205

Škrabal, M., & Kavka, M. (2021). Merging Professional and Collaborative Lexicography: The Case of Czech Neology. *International Journal of Lexicography*, ecab003. https://doi.org/10.1093/ijl/ecab003

Thorson, K., Vraga, E., & Ekdale, B. (2010). Credibility in context: How uncivil online commentary affects news credibility. *Mass Communication & Society, 13*(3), 289–313.

Valkenburg, P. M., & Peter, J. (2013). The differential susceptibility to media effects model. *Journal of Communication, 63*(2), 221-243. https://doi.org/10.1111/jcom.12024

Veisbergs, A. (1997). Īsinātās vārddarināšanas formas latviešu valodā [Abbreviated forms of word formation in Latvian]. *Linguistica Lettica I*, 271–282.

Wahl-Jorgensen, K. (2019). Questioning the Ideal of the Public Sphere: The Emotional Turn. *Social Media + Society*. https://doi.org/10.1177/2056305119852175

Walby, S. (2021). The COVID pandemic and social theory: Social democracy and public health in the crisis. *European Journal of Social Theory, 24*(1), 22–43. https://doi.org/10.1177/1368431020970127

Weber, P. (2014). Discussions in the comments section: Factors influencing participation and interactivity in online newspaper readers' comments. *New Media & Society, 16*(6): 941-957.

WHO. (2020, February 11). *WHO Director-General's remarks at the media briefing on 2019-nCoV on 11 February 2020*. https://www.who.int/director-general/speeches/detail/who-director-general-s-remarks-at-the-media-briefing-on-2019-ncov-on-11-february-2020

Wilhelm, C., Joeckel, S., & Ziegler, I. (2020). Reporting Hate Comments: Investigating the Effects of Deviance Characteristics, Neutralization Strategies, and Users' Moral Orientation. *Communication Research, 47*(6), 921–944. https://doi.org/10.1177/0093650219855330

Words of an unprecedented year. (2020). Oxford Languages. https://languages.oup.com/word-of-the-year/2020/

Yang, H.S. (2008). The effects of the opinion and quality of user postings on Internet news readers' attitude toward the news issue. *Korean Journal of Journalism & Communication Studies, 52*, 254-280.

Annexes

Annex 1. List of words with covid- created and their characteristics (1st period).

Stylistically neutral	Emotionally expressive
covidsufferers (kovidslimnieki)	covidpropaganda (kovidpropaganda)
covidpatients (kovidpacienti)	covidbenefit (kovidpabalsts)
covidtests (kovidtesti)	coviddeniers (kovidnoliedzēji)
covidnumbers (kovidskaitļi)	covidaffair (kovidafēra)
covidstatistics (kovidstatistika)	covidcombating (kovidapkarošana)
covidrestrictions (kovidierobežojumi)	covidgames (kovidspēles)
covidvictims (kovidupuri)	covidcretinism (koviddebilisms)
covidpandemic (kovidpandēmija)	covidpolution (kovidpiesārņojums)
covidcontext (kovidkonteksts)	covidhysterics (kovidhistēriķi)
covidcrisis (kovidkrīze)	covidquotas (kovidkvotas)
covidtreatment (kovidārstēšana)	covidnuclearbomb (kovidatombumba)
covidward (kovidpalāta)	covidproblem (kovidproblēma)
covidpandemic (kovidpandēmija)	covidshadow (living in the covidshadow) (kovidēna (dzīvot kovidēnā))
covidmorbidity (kovidsaslimstība)	covidinstruction (kovidinstrukcija)
covidvirus (kovidvīruss)	covidophobia (kovidofobija)
covidinfection (kovidinfekcija)	covidiot(s) (kovidiots(i)) (7 uses in total)
covidcomplications (kovidkomplikācijas)	covidiocy (kovidiotisms) (1 use in total)

Annex 2. List of words with corona- created and their characteristics (1st period).

Stylistically neutral	Emotionally expressive
coronavirus (koronavīruss)	coronacover (koronaaizsegs)
coronamail (koronapasts)	coronasuperstate (koronaslielvalsts)
coronaquarantine (koronakarantīna)	coronaeagle (koronaērglis)
coronasufferers (koronaslimnieki)	coronahysterics (koronhistērija)
coronatest (koronatests)	coronaspreader (koronaiznēsētājs)
coronawave (koronavilnis)	coronataxes (koronanodokļi)
coronavictim (koronaupuris)	coronavictory (koronasuzvara)
coronastatistics (koronastatistika)	coronacomment (koronakomentārs)
coronamortality (koronamirstība)	coronaparty (koronaballīte)
coronadisease (koronasērga)	*coronashit (koronasūds)
	coronaboost (pneumonia + coronaboost) (koronapiešprice (pneimonija + koronapiešprice))
	coronacargo (about a ship with infected passengers) (koronakrava (par kuģi, kurā ir inficēti pasažieri))
	coronacollapse (koronakrahs)
	coronaslumber (the State Revenue Service is sleeping) (koronamiedziņš (VID guļ))
	the coronablessed (koronaaplaimotie)
	coronastock (new sufferers) (koronakrājums (jauni slimnieki))

Annex 3. List of words with covid- created and their characteristics (2nd period).

Stylistically neutral	Emotionally expressive
covidevent (kovidpasākums)	covidiots (kovidioti)
the covidpositives (kovidpozitīvie)	covidbelievers (kovidticīgie)
covidworld (kovidpasaule)	covidparody (kovidparodija)
covidrestrictions (kovidierobežojumi)	covidtrifles (kovidsīkumi)
covidovercoming (kovidpārvarēšana)	covidaffair (kovidafēra)
covidmasks (kovidmaskas)	covidfraudsters (kovidafēristi)
covidoutbreak (koviduzliesmojums)	covidpass (kovidpase/kovidpass)
covidsufferers (kovidsaslimušie)	coviddeniers (kovidnoliedzēji)
covidvaccines (kovidvakcīnas)	covidshow (kovidšovs)
covidtest (kovidtests)	covidtax (kovidnodoklis)
covidward (kovidnodaļa)	*covidsham (kovidfufelis)
covidtopic (kovidtēma)	covidoppression (kovidspaidi)
covidsituation (kovidsituācija)	covidcouriers (people who import the disease) (kovidkurjeri (kas ieved slimību))
covidtimes (kovidlaiks)	covidmarket (kovidbirža)
coviddeceased (kovidmirušie)	covidproject (kovidprojekts)
the covidvaccinated (kovidvakcinētie)	covidera (kovidēra)
coviddeath (kovidnāve)	covidrecords (kovidrekordi)
covidstems (mutations) (kovidcelmi (mutācijas))	covidmutant (kovidmutants)
covidhotbed (kovidperēklis)	covidpumping (kovidpumpēšana)
covidspread (kovidizplatība)	covidbusiness (kovidbizness)
covidstatistics (kovidstatistika)	covidshadow (living in the covidshadow) (kovidēna (dzīvot kovidēnā))
coviddiagnostics (koviddiagnostika)	covidrhyme (kovidpantiņš)
covidpatients (kovidpacienti)	(viable) covidmolecule ((dzīvotspējīgā) kovidmolukula)
covidcrisis (kovidkrīze)	covidprophets (kovidpravieši)
covidregulations (kovidnoteikumi)	coviddisidents (koviddisidenti)
covidanalyses (kovidanalīzes)	covidmoney (granted) (kovidnauda (piešķirta))
covidwaves (kovidviļņi)	*covidfuckery (kovidhuiņa)
covidtreatment (kovidārstēšana)	*covidshit (kovidcrap)
covidsufferers (kovidslimnieki)	covidthinking (koviddomāšana)
covidspread (kovidzplatība)	covidfans (kovidfani)
covidclinic (kovidklīnika)	covidcow (as a religious symbol) (kovidgovs (kā svētā reliģija))
covidvaccination bureau (kovidvakcinācijas birojs)	covidsheep (kovidaita(s))
coviddiagnosis (koviddiagnoze)	covidperformance (kovidizrāde)
covidsymptoms (kovidsimptomi)	covidbenefit (kovidpabalsts)

Stylistically neutral	**Emotionally expressive**
covidhospital (kovidslimnīca)	coviddose (koviddoza)
covidprohibitions (kovidaizliegumi)	covidhysteria (kovihistērija)
covidnumbers (kovidcipari)	covidcover (kovidaizsegs)
covidholiday (kovidatvaļinājums)	covidpropaganda (kovidpropaganda)
covidplague (kovidmēris)	covidpromoter (kovidadvokāts)
	covidcatching (kovidsaķeršana)
	covidflag (kovidkarogs)
	after covidkariņš come what may (pēc kovidkariņa (kaut ūdens plūdi))
	covidkariņš on the rocks (a suggestion to move the world ice hockey championship to Slovakia) (kovidkariņš uz sēkļa (rosina PČ hokejā pārcelt uz Slovākiju))
	covidscaremongering (kovidbaidīšana)
	covidsigns (kovidzīmes)
	fincovidnavichok (a new variant in Finland) (finos kovidnavičok (Somijā jauns variants))
	covidfakery (kovidteātris)
	covidgoofs (kovidkuriozi)
	covidhysteria (kovidhistērija)
	the covidhysterics (kovidhistēriķi)
	covidhotbeds (kovidperēkļi)
	covidnews (kovidziņas)
	coviddeniers (kovidnoliedzēji)
	covidtotalitarianism (kovidtotalitārisms)
	covidfarce (kovidfarss)
	covidflag (kovidkarogs)
	covidatheists (kovidateisti)
	covidpause (during the summer (kovidpauze (vasarā))
	covid Memory water (kovid Memory water)
	covidbaloney (kovidmurgi)
	the covidboot mutation (the ban on boot sales during winter) (kovidzābaku mutācija (aizliegums tirgot ziemā zābakus))
	covidmoney (kovidnauda)
	covidjabs (kovidšprices)
	covidlife (koviddzīve)
	covidscaremongering (kovidbaidīšana)
	covid lockdown (kovid lockdown)

Stylistically neutral	Emotionally expressive
	covidfashists (kovidfašisti)
	covidbaloney (kovidmurgs)
	covidbubble (kovidburbulis)
	*covidretard (syntactically morphological) (kovid-daunelis (sintaktiski morfoloģiskais))
	covidpanickers (kovidpanikotāji)
	*covidcorpses (kovidmiroņi)
	covidkiosks (kovidkioski)
	covidiot panickers (kovidioti panikotāji)
	covidparanoia (kovidparanoja)
	covidbusiness (kovidbizness)
	itsy bitsy covidtrain (kovidvilcieniņš)
	covidsect (kovidsekta)
	covidsocialism (kovidsociālisms)
	coviddwarfs (kovidrūķi)
	covidreligion (kovidreliģija)
	*covidfinis (also finisas; the reaction to the number of sufferers in Lithuania) (kovidkirdik (arī kirdikas; reakcija par Lietuvā saslimušo skaitu))
	covidfarce (kovidfarss)
	*covidzombies (kovidnozombētie)
	coVID (a pun on the State Revenue Service or VID) (koVID (vārdu spēle ar Valsts ieņēmumu dienestu))
	covidtrolls (kovidtroļļi)
	covidbunk (kovidpekstiņi)
	covidcommunism measures (kovidkomunisma pasākumi)
	covidpropaganda (kovidpropaganda)
	covidsocks (kovidzeķes)
	covidcalenders (kovidkalendāri)
	pļaviņ'gobzem'ish covidretard (pļaviņ'gob-zem'veidīgais koviddauni)
	covidhive (kovidpūznis)
	covidworshippers (kovidpielūdzēji)
	covidfarce (kovidfarss)
	covidfestival (kovidfestivāls)
	covidrecord (kovidrekords)
	covidabsurd (kovidabsurds)
	covidchurches (kovidbaznīcas)
	covidservers (kovidkalpotāji)

Stylistically neutral	Emotionally expressive
	covidhuts (kovidbūdas)
	covidadepts (kovidadepti)
	the covidroot of it all ((kur aug) kovidkājas)
	covidcommunism (kovidkomunisms)
	covidinfluencer (kovidinfluenceris)
	covidhooey (kovidsviests)
	covidunidiots (meaning that there are no COVID-19 sufferers) (kovidneidioti (ka slimnieku nav))
	covidqueen schminkelviņķele (ķiņķelviņķele – kovidķēniņiene)
	covidfraudster Viņķele (kovidafēriste Viņķele)
	*covidfuckovid (kovidhujovid)
	covidpremium (kovidpiemaksa)
	covidstorm concerts (a reference to the band "Brainstorm") (kovidvētras koncerti (asoc. ar "Prāta vētru"))
	covidfans (kovidfani)
	covidmarathon (kovidmaratons)
	*covidbull (kovidfigņa)
	covidjournalists (kovidžurnālisti)
	covidicon – toilet paper (kovidikona – tualetes papīrs)
	covidgang (kovidbanda)
	covidviruslet (kovidvīrusiņš)
	covidnitwit (kovidmuļķītis)
	covidplandemic (koviplāndēmija)
	covidsect (kovidsekta)
	covidgull (screaming) (kovidkaija (kliedz))
	covidfairytales (kovidpasaciņas)
	covidwimps (kovidnīkuļi)

Annex 4. List of words with corona- created and their characteristics (2nd period).

Stylistically neutral	**Emotionally expressive**
coronadevelopment (koronattīstība)	coronascaremongering (koronašausmināšana)
coronavirus (koronavīruss)	coronascaremongering (koronašausmināšana)
coronasigns (koronapazīmes)	coronafearmongering (koronabiedēšana)
coronavictims (koronaupuri)	coronaera (koronaēra)
coronarestrictions (koronaierobežojumi)	coronagoody (koronamalacis) coronaparty (koronaparty)
coronatime (koronalaiks)	*coronadickery (koronahuiņa)
coronaevents (koronapasākumi)	coronafakery (koronateātris)
coronatopic (koronatemats)	coronadens (koronapūžņi)
coronastatistics (koronastatistika)	coronaorator (koronaorators)
	coronaexhibitionist (koronaekshibicionists)
	coronascaremonger (koronabaidītājs)
	coronavulgaris (koronavulgaris)
	coronaawakening (koronaatmoda)
	coronahysteria (koronahistērija)
	coronahysterics (koronahistēriķi)
	coronaplandemic (koronaplāndēmija)
	coronadenial (koronanoliegšana)
	*coronakiller (koronakilleris)

MAPPING EMOTIONAL RESPONSES ACROSS THE INDIVIDUAL MORAL SYSTEM IN SOCIAL NETWORK ETHICAL PUBLIC COMMUNICATION: A QUASI-EXPERIMENTAL STUDY

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ABSTRACT

Social networks are meant to be environments of interconnection, but nowadays are emotionally charged and fuelled by polarizing dynamics, particularly on ethical issues. What appear to be overlooked are the moral motivational systems that can moderate emotional responses prompted by the communicative online content. Based on the individual Moral Foundations, namely Care, Fairness, Loyalty, Authority, and Purity (Graham et al., 2008), this quasi-experimental study aims to understand how certain online public messages structured through different moral framings affect distinct emotions. We explored with a sample of adult participants (N=306, F=58.5%) the different emotional responses after the presentation of posts on immigrants' reception in Italy, simulating interactions in an online context through three different framings: the first focused on the safety, the second on the relevance of help, and a neutral message. The results confirm distinct emotional responses according to different frames and within individual moral systems and political orientation.
Keywords: Toxic emotions, prosocial emotions, Moral Frame, Social Networks, Ethical Communication, Moral Foundations

Keywords: Toxic emotions ▪ prosocial emotions ▪ Moral Frame ▪ Social Networks ▪ Ethical Communication ▪ Moral Foundations

1. INTRODUCTION: SOCIAL NETWORKS AND POLARIZED STRUCTURES

With information technology, polarization seems to have spread the mass public opinion even in online contexts (Jacobson, 2006; Bennett & Iyengar, 2008). Several studies on public interactions on Social Networks (SNs) show that online contexts are highly polarized virtual environments (Cinelli et al., 2020; Bail et al., 2018). The radicalization phenomena may be due to the specific algorithms of SNs that 'learn

from the users' choices' (Bruns, 2019, p. 2) and act by collecting user-consistent information reinforcing selective exposure (Iyengar & Hahn, 2009; Lawrence et al., 2010; Mutz, 2006). These mechanisms can often lead to a consolidation of one's own belief system through heuristics or fuel the process of seeking self-consistent information (homophily) to the extent of the formation of echo-chambers (Cinelli et al., 2021; Brugnoli et al., 2019; Del Vicario et al., 2016), closed network structures within specific online groups that may, in turn, variably affect the formation of information and communication filter bubbles (Bruns, 2017). It is often hard to assess whether echo chambers cause filter bubbles or vice versa; what does seem clear is that both phenomena can variably lead to many polarized and radicalized online discussions as a cascade effect (Brugnoli et al., 2019; Cinelli et al., 2020), but online discussions between users could make a difference if interactions were constructive and participatory.

Nowadays the effect of polarizing structures is reflected in online dynamics, especially in relation to ethical issues (interactions in which one or more victims, often women are assaulted or defended; e.g., in Italian contest, Carola Rachete, Liliana Segre, Silvia Romano), migrant landings in Italy or Europe, or more recently broader issues related to vaccines (Germani & Biller-Andorno, 2021; Kim & Kim, 2021; Kim et al., 2021). Increasingly, these dynamics may evolve into the escalation of verbal violence, hate speech, verbal aggression or uncivilised online communication (Anderson et al., 2014) marked by an 'unnecessary disrespectful tone' (Coe et al., 2014, p. 660). For instance, only in 2018, it was reported that 84% of Americans have experienced episodes of incivility online, with a frequency of about 11 times per week (KRC Research, 2018). Online incivility can lead users away from democratic discussions and fuel a general sense of dissatisfaction towards political-public discussions (Anderson et al., 2014). Uncivil online interactions may fuel the online radicalization phenomena, affecting users' perceptions and increasing risk perceptions (Anderson et al., 2014) generating anger, anxiety, and mental distress or fuelling other kinds of aggressive communication (Gervais, 2015).

Studies of online interactions have strongly stressed the mass effects of online public discussions, the polarized dynamics within SNs. However, the aspects that seem less investigated in online public interactions are those that explore the role of the frame used by the source on SNs and specific emotional citizens' responses, according to their individual moral system. Examining individual moral antecedents, in relation to the emotional effects elicited by the specific types of communication can be a strategy in order to clarify the dynamics of online interaction on ethical issues and what may elicit certain emotional responses. Indeed, specific emotions may represent a relevant indicator for understanding the effects of online institutional communication on citizens (e.g., Brady et al., 2017).

The aim is therefore to explore with a psycho-social approach, the role of the source's frame (Feinberg & Willer, 2015) on users' emotional responses (Graham et

al., 2009) within the functioning of the individual moral system in online public discussions on ethical issues (Paciello et al., 2021; D'Errico & Paciello, 2018; 2019).

1.1. Toxic and prosocial emotion

According to the psycho-social literature emotional activations can be predictors of enacted behaviour or affect the individuals' motivational states (Haidt, 2001). Extensive research in relation to stimuli presentation has adopted the General Aggression Model (GAM), whereby aggressive priming may elicit aggressive thoughts, emotional responses and behaviour, increasing the accessibility of these triggers (Anderson & Bushman, 2002; 2001; Anderson & Huesmann, 2007). Anderson and colleagues provide evidence of possible factors for the emergence of aggressive behaviour, including the emotional arousal that may occur after the interpretation of a given event or stimulus (Anderson et al., 2010). As well as repeated exposure to certain aggressive stimuli may fuel the accessibility of hostile opinions, beliefs or emotional reactions (e.g., increase in hostile emotions: Burnay et al., 2022; Anderson & Bushman, 2002; 2018), the same could happen when it concerns communicative online stimuli. This is even more so when we reflect on the pervasiveness of interactions in virtual environments.

Particularly in relation to specific emotions such as anger or contempt (Anderson et al., 2010), it has been argued that these emotions might fulfil a dual function: antisocial, aggression-related or prosocial one (Anderson et al., 2010; Horberg et al., 2011; Rozin et al., 1999). Despite the evidence, prosocial and antisocial behaviours are not systematically opposing behavioural tendencies. An example is the possibility of being aggressive or hostile but doing so in order to defend someone in a difficult state (e.g., empathetic anger; Kam & Bond, 2009; Hoffman, 2008).

Other studies similarly show that emotions functional for aggression can also act in a prosocial function. In fact, it has been argued that the triad anger-disgust-contempt may fulfil a function in response to a perceived violation (CAD or third party anger), configuring a type of reaction akin to the empathic anger felt at a perceived injustice perpetrated against someone in a state of need (Hoffman, 2008; Rozin et al., 1999). Other researchers, adopting the same theoretical perspective (GAM, Anderson & Bushman, 2002), further show that the presentation of prosocial cues as games were positively related to helping behavior (Greitemeyer & Mügge, 2014; Gentile et al., 2009).

Different kinds of emotions such as empathy, compassion and sadness are instead directly associated with prosocial behaviour evoking help or comfort to someone (Eisenberg et al., 1989). These emotions in particular are often defined as prosocial emotions, related to care and protection, linked to actions aimed at reducing the victims' state of suffering (Haidt, 2003; Batson, 1987; Dovidio, 1984; Hoffman, 1982).

Current researches dealing with emotions in online contexts have adopted strategies to map users' emotional reactions, as well as specific social media metrics using

also reactions (i.e., categorical representations of emotional states) comparing these with sentiment analysis (Poecze et al., 2018) or specific comment markers (Herring & Dainas, 2017).

Other studies by quali-quantitative methods have investigated online discussions on ethical issues based on social-cognitive approach, including analyses of the emotions conveyed by users through their comments (D'Errico & Paciello, 2019; Paciello et al., 2021). Similarly, other recent studies have addressed moral emotions related to online phenomenon (e.g., online shaming; Blitvich, 2022).

Nevertheless, few studies jointly examine institutional communications on ethical issues and the emotional responses of citizens. Emotions may represent an important factor for understanding the effectiveness and persuasiveness of certain types of messages conveyed in online contexts (Feinberg & Willer, 2013). Taking into account the institution's responsibility in online communication processes, especially when it involves ethical issues (Ibrahim et al., 2018), it may be interesting examining users' emotions.

It can be likewise useful to explore citizens' emotional responses towards communications in relation to each individual moral system in order to understand how and whether these individual systems could interact with different types of communications eliciting distinct emotional activations.

1.2. Moral frame and moral motivational system

Although studies on online interactions capture trends in users' mass opinions, citizens' political engagement or election-related support, the aspects concerning the emotional citizens' effects of online moral communication styles are less investigated, especially about one of the most discussed moral issues on social networks: immigration (Chung & Zeng, 2016).

Language, especially linked to moral rhetoric, can be used creatively to persuade and change people's beliefs (Pizarro et al., 2006; D'Errico et al., 2022). Moral framings are defined as a technique in which an issue is framed consistent with the moral values of those who receive such content (Feinberg & Willer, 2013). Such as morality may play an influential role in training attitudes and behaviors, it is not surprising that the moral frame can be a strong persuasive tool, especially in the perspective of enhancing moral emotions (Feinberg & Willer, 2019).

Even though some studies have demonstrated the varying effectiveness of moral reframing, potential moderating factors that strengthen or weaken the frame effect can be traced, such as individual moral foundations. Indeed, from the perspective of the presentation of moral activating stimuli, some authors have investigated the effect related to the presentation of different framed messages according to Moral Foundation Theory (MFT: Graham et al., 2009; Feinberg & Willer, 2015; Clifford et al., 2015; Clifford, 2019). MFT initially identified five moral domains: care, fairness, loyalty, authority, purity (Graham et al., 2008). The moral domains explain different

moral evaluations regarding various cultures and political orientations (Haidt & Joseph, 2007; Graham et al., 2013). The moral foundation of care is related to promoting care and sensitivity for others suffering; the moral foundation of fairness focuses on ensuring the fair treatment of others and justice. The other foundations (authority, loyalty, and purity) emphasize aspects related to community: the moral foundation of ingroup-loyalty is centred on promoting the interests of the group; the moral foundation authority-respect emphasises following authority, tradition, and support toward a hierarchical social structure; the moral foundation of purity-sanctity is focused on adherence to standards of decency, particularly influenced and rooted in different cultural contexts (Feldman, 2021; Schwartz, 2017). The five Moral Foundations are typically mapped on two different dimensions, with harm-care and fairness-reciprocity defined as individualizing foundations, while loyalty to the group, respect for authority and purity-sanctity as binding foundations (Graham et al., 2009; 2011; 2012; Weber & Federico, 2013). The first ones are often transversal to individuals, the second ones may vary across cultures and contexts.

Moral rhetoric can be a strategy through which foster persuasion, but likewise a certain frame that is consistent with someone's moral values can exacerbate hostility in those who have a different moral orientation (Feinberg & Willer, 2013). In terms of the emotional effects elicited by a given frame, forms of communication related to caring for other or to communication styles that emphasize the sense of "we" are more effective in promoting moral emotions associated with caring and suffering (D'Errico et al., 2022; D'Errico, 2020; Miller & Cushman, 2013, Haidt & Joseph, 2004; Haidt, 2001) or empathic anger towards those in a state of need (Gutierrez & Giner-Sorolla, 2007; Kam & Bond, 2009; Rozin et al., 1999). At the same time, communications that highlight moral violations or the perceived violation of rights that are inconsistent with one's moral domain may induce other-condemning emotions such as anger, contempt, disgust (Horberg et al., 2011; Hoffman, 2008; Haidt, 2012; Rozin et al., 1999).

1.3. Moral frame and political orientation

Other researches, stressing the importance of the construction of the moral frame, argue its effects on the possible influences of the individual moral system and political orientation. Some authors have specifically addressed the MFT (Graham et al., 2008) according to individual political orientation and have shown that individual moral domains may also reflect personal political orientation (Graham et al., 2009; 2011; 2012). Liberals have been shown to more strongly support the foundations of caring and fairness, and based many of their political attitudes on compassion and social justice (Haidt, 2012). Conservatives, on the other hand, more strongly support the foundations of loyalty, authority, and sanctity, founding many of their political positions on patriotism, traditionalism, and purity (Caprara et al., 2006; Haidt & Joseph, 2007).

Embedding this perspective within moral frames, a message that employs certain moral rhetoric such as Care or Fairness is more persuasive for liberals, conversely a frame that reflects moral values such as Authority, Loyalty or Purity is more persuasive for conservatives (Feinberg & Willer, 2013; Clifford & Jerit, 2013). In addition to the persuasive effect, this link is also evident in the use of arguments consistent with one's political orientation (Care & Fairness- liberals; Authority, Loyalty & Purity - conservatives; Feinberg & Willer, 2015). It has also been shown that the effectiveness of moral framing depends on the fit and consistency of the values conveyed by the message with those held by the target audience (Day et al., 2014). It has been found from the perspective of moral framing that constructing an appeal in support of something (seemingly far from the recipient's political orientation) that includes a consistent value to the audience is more persuasive (e.g., support for same-sex marriage framed on the value of patriotism will be more persuasive on conservatives than one focused on fairness; Feinberg & Willer, 2015). In order to sort the literature presented that has addressed moral emotions, moral frames, and moral motivations, we present a table of the work mapped in this paper (Table 1).

Table 1. Cited works about emotions, moral frame, and moral system

	Author	**Methodology**
Moral emotion	Haidt, 2001	Review
	Anderson & Bushman, 2002; 2001	Review
	Anderson & Huesmann, 2007	Review
	Anderson et al., 2010	Meta-analysis
	Burnay et al., 2022	Review
	Horberg et al., 2011	Dissertation
	Rozin et al., 1999	Quasi-experiment
	Kam & Bond, 2009	Questionnaire
	Hoffman, 2008	Review
	Current work aim	
Online emotion	Poecze et al., 2018;	Content analysis
	Herring & Dainas, 2017	Sentiment analysis
	D'Errico & Paciello, 2019	Content analysis
	Paciello et al., 2021	Content analysis
	Blitvich, 2022	Content analysis
	Current work aim	

	Author	Methodology
Moral Motivation	Feinberg & Willer, 2013; 2015; 2019	Quasi experiment
	Graham et al., 2008; 2009	Questionnaire
	Graham et al., 2011; 2012, 2013	Questionnaire; Questionnaire; Review
	Feldman, 2021	Review
	Horberg et al., 2011	Dissertation
	Weber & Federico, 2013	Questionnaire
	Caprara et al., 2006	Questionnaire
	Haidt & Joseph, 2007	Dissertation
	Rozin et al., 1999	Quasi-experiment
	Schwartz, 2017	Review
	Clifford et al., 2015	Quasi-experiment
	Haidt, 2012	Review
	Current work aim	
Moral frame	Feinberg & Willer, 2013; 2015; 2019	Content analysis
	Clifford & Jerif, 2013	Quasi-experiment
	Clifford et al., 2015	Quasi-experiment
	Clifford, 2019	Quasi experiment
	Current work aim	
Political orientation	Feinberg & Willer, 2013; 2015; 2019	Quasi experiment
	Caprara et al., 2006	Questionnaire
	Graham et al., 2012	Questionnaire
	Haidt & Joseph, 2007	Dissertation
	Clifford et al., 2015	Quasi-experiment
	Haidt, 2012	Review
	Clifford, 2019	Quasi-experiment
	Current work aim	

2. AIM AND HYPOTHESIS

On the basis of these theoretical assumptions through a psycho-social approach, the aim of the work is to explore firstly the emotional effect linked to different communicative frames that convey ethical issues (on the theme of immigration); the second aim is to understand whether and if some specific emotional effects can also be explained in the light of more strictly individual dimensions such as MFT and political orientation in a context that simulates the online dynamics of SNs in an ecological way. Consistent with some studies dealing with moral frames (Caprara et al., 2006; Feldman, 2021; Schwartz et al., 2010; Schwartz, 2007; 2017), we will use:

- Helping frame for content that conveys issues related to helping and accepting migrants, often associated with the moral domains of care and fairness (individualizing foundation);

- Safety frame for content dealing with issues of safety, security, and law enforcement, which may draw on the moral domains of authority, loyalty, and purity (binding foundation).

The hypothesis underlying the work:

HP1: The Helping frame message elicits other-suffering emotions (empathy, compassion, and sadness), while the Safety frame message elicits other-condemning emotions (contempt, anger, disgust, outrage, and annoyance);

HP2: The second hypothesis is related to the analysis of the emotional responses triggered by the message types. Considering individual moral motivations and possible relationships with political orientation, the hypothesis is that the individual moral dimension could help to better understand the users' emotional responses according to the specific moral frame presented.

3. METHODS

3.1. Sample

The sample was invited to fill-in two online surveys in two different phases (10 days later). The overall convenience sample consisted of 329 adult subjects who completed the first online survey. The first sample is composed by students and external participants; students in turn recruited a non-student participant of the opposite gender to their own, through snowball sampling. The sample of the first phase (Mage=37.3 years, DSage= 12.3) consists of 57.1 % women and 42.5 % men. 55.3 % of the subjects has a high school diploma or less, 37.1 % of the initial sample has a bachelor degree or a master degree, and 7.6 % has continued with post-graduate studies. During the second phase the participants were 306 (attrition= 23 subjects). Gender descriptive statistics are presented below (Table 2).

Table 2. Sample Descriptive statistics

	Phase 1		Phase 2	
Sample	**N**	**%**	**N**	**%**
Male	139	42.5%	126	41.2%
Female	188	57.1%	179	58.5%
Other	1	0.3%	1	0.3%
Total	329	100%	306	100%

Concerning the geographical origin of the sample, this was divided into the five areas, according to ISTAT parameters (Northwest, Northeast, Centre, South, Islands,

outside Italy). The descriptive statistics on geographical location are presented below (Table 3).

Table 3. Sample geographical origin

	Phase 1		Phase 2	
Sample	**N**	**%**	**N**	**%**
Northwest	99	30.1%	92	30.1%
Northeast	55	16.7%	49	16%
Centre	98	29.8%	92	30.1%
South	39	11.9%	36	11.8
Island	35	10.6%	34	11.1%
Outside Italy	3	0.9	3	0.9%
Total	329	100%	306	100%

3.2. Procedure

Participants first viewed and sent their informed consent to take part in the research. Each person who agreed to participate to the research was invited to recruit another participant of the opposite sex, in order to balance gender sample. In the pre-assessment phase, each participant received an online survey and entered an anonymous code, their gender, year of birth, political orientation and filled-in the Moral Foundation Questionnaire scale (Bobbio et al., 2011).

After ten days from the first questionnaire, the participants have filled-in a second online survey, where the quasi-experiment is developed.

Quasi-experiment is an ecological procedure in which researchers do not have the same degree of control as in a real experiment. In this way, an effort was made to find a robust alternative as similar as possible to a real experiment through random assignment of conditions.

This quasi-experiment is a between-subjects design and it is structured into three conditions. Each condition has been included in three different links, containing three distinct frames that have been drawn up in order to create and to simulate an online interaction in an ecological way. Those who received a specific link containing the communication scenario forwarded it to the external participant who was introduced to the research. The sample was further balanced by communicative scenarios. After reading the post, each participant entered reactions, possible comments, and intentions to share. Then each participant added the emotions felt after reading the post.

3.3. Measures

During the first online survey, participants included personal information (age, gender, and political orientation).

Independent variables: Moral Foundation Questionnaire (MFQ). Then they completed the MFQ, (Bobbio et al., 2011: α=.71). The scale is divided into two different dimensions: the first one aims to investigate the relevance of the moral domain, consisting of 15 items and one control item (Q. When you have to decide whether something is right or wrong, how relevant are the following considerations for you?; e.g. item. 'Whether someone has suffered emotionally or not') on a Likert scale from 1 (Not at all relevant) to 5 (Totally relevant).

The second is based on 15 items and a control item and it provides the degree of agreement with certain statements (Q. Please read the following statements and indicate your degree of agreement or disagreement; e.g., item 'Compassion for those who suffer is the most important virtue') on a Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). The Cronbach's alpha of the scale used is good, α=.86.

Online frame. The stimuli were formulated starting from the real online experience; the posts were first extrapolated from the original sources (institutional actors of the Italian context) and then redefined in order to reflect their content. One is related to an institutional-governmental communication, calling for a sense of responsibility of European States and justice, starting from an Italian political conservative source (Safety frame, Figure 1); the second refers to the victims of the topic, migrants; it focuses on inclusion, help and taking a perspective of those who are in a state of difficulty, representing a more liberal perspective (Helping frame, Figure 2). In addition to these two messages, a control message was added; this was inspired by a super-partisan journalistic source (Figure 3).

The messages were stylistically composed in order to make them credible and reliable, by graphically replicating the posts of an online context. For all posts the source was kept identical, and as general and broad as possible to avoid distortions due to a specific source.

Figure 1. Safety Frame

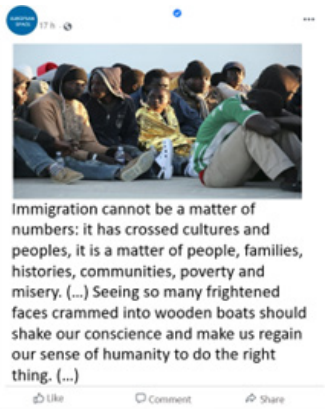

Figure 2. Helping Frame

Figure 3. Control message

Political orientation. The users' political orientation was divided into three subgroups: liberal, conservative and other/not specified (none or apolitical; e.i., open answer: "I do not identify myself in any party").

Dependent variable. The general emotions felt after reading the message (Q. After reading the message, what emotion did you feel?), rated on a Likert scale from 1 (Not at all) to 5 (Completely).

The emotions investigated were: empathy, compassion, sadness, anger, indignation, disgust, contempt, annoyance. These emotions on the basis of Haidt's (2001) model of moral emotions were grouped as follows:

- Other-suffering emotions (empathy, sadness, and compassion; α: .77)
- Other-condemning emotions (anger, disgust, contempt, outrage, and annoyance; α: .82).

3.4. Analysis Plan

As a preliminary analysis, a control on the normality of distribution of moral domains was performed. Subsequently, the distribution of the overall sample on political orientation was explored.

Afterwards, gender differences between the different emotional activations and the Moral Domains were assessed through correlations. Finally, it was performed the manipulation check conveyed by the messages.

In order to verify the first hypothesis concerning the emotions elicited by the different frames, we proceeded with a multivariate analysis of variance; the three communicative frames were included as independent variables and the different emotional activations other-suffering (empathy, compassion, and sadness) and other-condemning (contempt, anger, disgust, outrage, and annoyance) were explored as dependent variables.

For the second hypothesis, regarding the role of moral domains (Graham et al., 2008), several linear regressions were run, each subdivided by frame type and political orientation (liberal, conservative, and other). The five moral domains (Care, Fairness, Loyalty, Authority, and Purity) were included as independent variables and the other-suffering and other-condemning emotions as dependent variables.

4. RESULTS

Preliminary Analysis

The analyses were performed with the statistical software IBM-SPSS 27. As a preliminary analysis, the normality distribution of the moral domains was tested for Skewness and Kurtosis (Table 4).

Table 4. Descriptive statistics for Moral Domains

Moral Domain	M	DS	SK	K
Care	4.88	.65	- 1.25	2.24
Fairness	4.85	.58	-.734	1.15
Loyalty	3.97	.82	-.202	-.130
Authority	3.30	.95	-.026	-.324.
Purity	3.19	.99	.179	-.229

The distributions of the moral domains are generally good, only the domain of Care shows a kurtosis slightly higher than 2. The descriptive statistics according to political orientation show that the sample is mainly liberal (Table 5). It is arguable that the slightly higher kurtosis of Care's moral domain can also be explained in terms of the prevalent liberal political orientation (Graham et al., 2009)

Table 5. Descriptive statistics for political orientation

	Phase 1		Phase 2	
Political orientation	N	%	N	%
Liberal	165	50.2%	150	49 %
Conservative	62	18.8%	59	19.3 %
Other	102	31 %	97	31.7 %
Total	329	100%	306	100%

To explore effects due to the subjects' geographic origin, an Anova was performed, including as independent variables the moral frames and the five Italian geographic areas, and as dependent variables the two sets of moral emotions. Results showed no main effect of geographic origin of the sample nor interaction with moral messages. In order to understand the type of relationship between moral domains and emotions, correlations were performed according to gender (Table 6).

Table 6. Correlation between Moral Domains and emotions by gender

	Moral Domain				
Emotions gender difference	Care	Fairness	Ingroup	Authority	Purity
MALE					
Other-suffering emotions	.246**	.224*	.024	-.192*	-.055
Other-condemning emotions	.173	.167	.010	-.120	-.058
FEMALE					
Other-suffering emotions	.337**	.239**	.062	.030	.038
Other-condemning emotions	.225**	.235**	.130	.121	.145

NOTES: **p<.01; *p<.05.
*Other Suffering Emotions: empathy, compassion, sadness.
**Other Condemning Emotions: anger, contempt, disgust, outrage and annoyance.

Manipulation check

Afterwards, the three messages were tested by the manipulation check, in relation to the theme (Security and Help; Table 7). The participants believe that the message of Safety conveys the theme of Security (M= 3.00; $F_{(2,306)}$=15.16; p<.000), while the message related to the helping conveys Help (M= 3.84; $F_{(2,306)}$=60.23 ;p<.000), as well as the control message was confirmed to be informative (M= 3.35; $F_{(2,306)}$=28.01; p<.000) as supported by the post hoc (Tukey's-b).

Table 7. Manipulation check about beliefs of messages

	Online frame	M	SD
Security	Safety	3.00	1.17
	Helping	2.16	1.07
	Control	2.61	.99
Help	Safety	2.18	1.13
	Helping	3.84	1,03
	Control	3.14	1.08
Information	Safety	2.29	1.05
	Helping	3.10	1.15
	Control	3.35	.95

Emotions elicited by the messages

The MANOVA shows a significant difference in the other-suffering emotions for the Helping frame and the Safety frame compared to the control ($F_{(2,306)}$= 6.14; p<.002). Furthermore, the Safety message exhibits a principal effect on other-condemning emotions ($F_{(2,306)}$= 19.36; p<.000; Table 8).

Table 8. Descriptive statistics of emotions towards frame

		Other-Suffering emotions		Other-Condemning emotions	
Frame message	N	M	SD	M	SD
Safety	102	2.90	.90	2.32	.92
Helping	100	3.15	.93	1.94	.68
Control	104	2.69	.99	1.62	.78

Based on the MANOVA, HP1 appears to be partially confirmed. It is possible to confirm that Safety framing elicits other-condemning emotions, while there are no significant differences between the Help and the Safety frame on other-suffering emotions.

How moral domain impact differently on emotional responses

To test HP2, several linear regressions were performed in order to understand the

impact of Moral Foundation on the emotional responses according to the specific frame and the individual political orientation (liberal, conservative, and other/not specified). Each regression was split for different frames and political orientation. The first contains the moral domain of care and fairness (Individualizing Moral Foundation) as independent variable and other-suffering emotions as dependent variable; the second was performed with Moral Foundations of ingroup, authority, and purity (Binding Moral Foundations) on other-suffering emotions. The next regressions were performed in the same way but inserting as dependent variable other-condemning emotions (Table 9).

Table 9. Relation between individualizing and binding Moral Foundations with emotions

	Message / Moral Foundation	**Helping-frame**				**Safety-frame**			
	political orientation	**Liberal**		**Conservative**		**Liberal**		**Conservative**	
		β std	*R^2 adj*	*β std*	*R^2 adj*	*β std*	*R^2 adj*	*β std*	*R^2 adj*
Individualizing	**Care/Harm**								
	Other Suffering*	.556	.234			.364+	.090		
	Fairness/ Reciprocity								
	Other Suffering								
Binding	**Ingroup /Loyalty**								
	Other Suffering*			.656	.147				
	Authority/ Respect								
	Other Suffering*								
	Purity/Sanctity								
	Other Suffering*					.425	.037		

NOTES:
*__Other Suffering Emotions__: empathy, compassion, sadness. + These emotions show a positive correlation with a subset of Other Condemning emotions (anger and outrage) within the Security frame and liberal political orientation ($p < .002$). Even anger together with outrage are activated in relation to Care moral domain.
**__Other Condemning Emotions__: anger, contempt, disgust, outrage and annoyance. All models are significant ($p<.05$).
In the table we show only the significant regressions, related to the other-suffering emotions.

The results show that the activation of care and fairness is associated with higher other-suffering emotions for subjects who have a liberal political orientation and read the Helping frame. R^2 explains 23.4 % of the model. The same pattern occurs for the Safety message, but the effect is reduced, R^2 explains 9% for this model.

Instead concerning conservative political orientation and the message of Security, the ingroup domain affects other-suffering emotions; the model explains 14.7%.

Regarding other-condemning emotions and moral domains, no significant link emerged. Assuming that there may be a specific relationship between individual moral domains and other-condemning emotions (Graham et al., 2012; 2009) and in

order to explore these particular types of emotions, we performed other simple linear regressions, inserting only one domain at time as the independent variable for other-condemning emotions (Table 10).

Table 10. Relation between other-condemning emotions and singular Moral Foundation

Message / Moral Foundation	**Helping-frame**				**Safety-frame**			
political orientation	**Liberal**		**Conservative**		**Liberal**		**Conservative**	
	β std	*R^2 adj*	*β std*	*R^2 adj*	*β std*	*R^2 adj*	*β std*	*R^2 adj*
Fairness/Reciprocity								
Other condemning**					.282	.061		
Purity/Sanctity								
Other condemning**							.579	.275

The second set of regressions show that other-condemning emotions are instead activated regarding the moral domains of fairness, when those with a liberal orientation read the Safety-frame.

The moral domain of purity affects the emotional other-condemning responses in those who have a conservative political orientation and read the Safety-frame. The last model related to the other-condemning emotions and purity explains 27.5 %. Finally, with regard to the authority and ingroup domains, no significant βemerged. The same also occurred with the political orientation other/unspecified and for the control condition.

5. DISCUSSION

When we discuss about moral communication, there are two orders of issues to be addressed: the first concerns the construction and semantic characteristics of communication; the second involves the influence of recipients' individual moral system and the emotional effects of moral communications.

Although the results are partially consistent with the literature (Feinberg & Willer, 2019; Graham et al., 2012; 2013), the study further helps to clarify how emotions elicited by reading different moral frames, can be influenced by individuals' distinct moral activations.

The Safety and the Helping messages were reformulated by real-world political actors, starting from actual online posts. Despite this, it was not expected that the Safety frame would elicit emotions related to condemnation, especially in those with a conservative political orientation. On the contrary, it could be assumed that this message would elicit other-suffering emotions especially in reference to moral domains typically closer to conservatives (Graham et al., 2009; Haidt et al., 2009; Feinberg & Willer, 2019).

In addition, a positive correlation of the other-suffering emotions (Care domain

and liberal orientation) with a subset of other-condemning, such as anger and outrage, emerged on both the Helping and the Safety frame. This can lead to the assumption that anger and outrage (included within the group of other-condemning emotions), experienced after reading the two different frames by those with a liberal political orientation, may be emotions with an empathic function (Hoffman, 2008; Rozin et al., 1999).

The Helping-frame and the Security-frame resonate differently with different individual moral activations. It was assumed that other-condemning emotions might be activated in a liberal audience when reading a Safety frame, or in a conservative audience when reading the same frame (Feinberg & Willer, 2019). Surprisingly, Purity alone affected other-condemning emotions when reading a message such as Safety, this confirmed that participants with higher levels in Purity tend to activate negative emotions in relation to a Safety frame, not in relation to a helping or neutral one. How the same set of emotions is elicited differently depending on the narrative construction of the message and individual moral motivations?

A first result that is not exactly in line with the literature concerns the functioning of other-suffering emotions on the Safety message. In fact, in this scenario citizens with a liberal political orientation experience these emotions, but it is further possible to note an impact of the moral domain of purity (Feinberg & Willer., 2019; Day et al., 2014; Graham et al., 2009; 2012).

What can be also discussed is that the safety message elicits the same type of emotions in citizens, but the emotional responses can be explained differently based on the individual moral system. Conservative political orientation and strong activations of the purity domain elicit other-condemning emotions; similarly and differently, liberal political orientation and the fairness domain elicit the same emotions, both acting for the safety message. Also this second result is not exactly consistent with the literature (Feinberg & Willer, 2019; 2015): given that the safety message was structured according to a conservative political actor, one might have expected that this type of message would not elicit emotions of condemnation by conservative citizens.

It is noteworthy to appreciate why certain emotions are felt in public online discussions on ethical issues. Possible explanations for many online phenomena have been attributed to contagion or filter bubble (Bruns, 2017). Underlying emotional responses, what moral motivations are involved? This study attempts to take a first step in addressing this question, recognizing that the best approaches would be those that employ quantitative as well as qualitative methods directly on public discussions.

Emotional activations may affect the behaviours that are enacted (Anderson & Huesmann, 2007; Anderson & Bushman, 2001) or these may have an impact on individual moral judgments (Horberg et al., 2011), particularly in terms of online interactions in which communication dynamics may also negatively affect emotional contagion (Brady et al., 2017; Kramer et al., 2014; Fowler & Christakis, 2008).

We may often consider the effects of online polarizations, tracking possible underlying causes. It is therefore essential to consider complementary approaches taking into account different causes, visible effects of these phenomena but also what may feed these from inside, such as the sender's choice of communication frame within possible recipients' individual factors.

The strategies through which relevant issues such as reception themes are conveyed are key to establish a constructive dialogue with citizens and to bring into civil online discussions. A message about immigration referring to safer laws and boundaries can trigger hostile emotional reactions, which can lead to unjustified hostile, aggressive discussions, and ideological radicalization (Paciello et al., 2021).

The fostering of constructive interactions on ethical issues should start from appropriate communications that do not encourage negative emotional activation but rather promote trust and civil interactions (Antoci et al., 2018). The use of certain linguistic constructions and meanings is crucial, since these messages have an impact on the individual motivational system in those who receive them, especially, but not only- when the source plays a public role and conveys the protection of someone in difficulty (D'Errico et al., 2022). These results also highlight the communicative responsibility of institutional leaders towards citizens in online contexts in promoting cooperation or moderating citizens' negative emotions.

5.1. Limits and next step

It is therefore necessary to consider the limitations of the present study. First of all, the sample appears to have mainly a left-handed political orientation. Despite this, even among conservatives, some emotional effects are evident with respect to a specific moral domain such as purity.

Furthermore, regarding the third political orientation of the participants (other/unspecified), no significant findings emerged. This arguably suggests that those who do not identify with any political orientation may find the Helping frame and Security one not emotionally activating simply because these moral rhetorics would reflect the two political orientations (conservative and liberal, tout court) towards which they are not reflected. It would be interesting in future studies to offset the sample also by political orientation.

Another possible limitation of the work is that it gathers the emotions felt after reading the message (and in addition mapping also the reactions) through online surveys (Brody & Hall, 2008). Future studies could consider combining these techniques with other methods of investigating emotions.

In addition, it is possible that the participants were able in some way to dissimulate the emotions felt and not only that, for social desirability reasons (Bobbio & Manganelli, 2011). Especially about the chosen topic, this could be a very important aspect not to be overlooked.

Moreover, it is important to underline that the question regarding emotions felt

is likely to be a generic question. This choice was made to specifically understand the emotions felt as a function of the message read, without further specification. In future studies, it will also be useful to clarify towards whom or what the question is directed. For example, the emotions felt either toward the source speaking, or toward the object of the discourse, i.e., refugees.

It might be useful to map the qualitative-responses, i.e., the comments of the users, in order to map possible correspondences between the writing, the moral functioning, and the emotions.

It should be noted that the sample is Italian; this may have affected the emotional reactions aroused by the different messages, based on real online speeches of Italian institutional sources. Consistent with what was discussed, it would be useful to extend this study in a cross-cultural perspective or to distinguish the sample by country, in order to understand if the emotional effects of the messages can be generalized or whether they reflect the sample's geographic origin or if the effects depend on implicit identification with the rhetoric used by Italian institutions. The Italian sample could be morally activated differently.

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https://www.irit.fr/sterheotypes/people/.

REFERENCES

Anderson, A. A., Brossard, D., Scheufele, D. A., Xenos, M. A., & Ladwig, P. (2014). The "nasty effect:" Online incivility and risk perceptions of emerging technologies. *Journal of Computer-Mediated Communication, 19*(3), 373-387. https://doi.org/10.1111/jcc4.12009

Anderson, C. A., & Bushman, B. J. (2001). Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature. *Psychological science, 12*(5), 353-359. https://doi.org/10.1111/1467-9280.00366

Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology, 53*, 27–51. https://doi.org/10.1146/annurev. psych.53.100901.135231

Anderson, C. A., & Huesmann, L. R. (2007). Human aggression: A social-cognitive view. The Sage handbook of social psychology, 259-287.

Anderson C. A., Shibuya A., Ihori N., Swing E. L., Bushman B. J., Sakamoto A., Rothstein H. R., Saleem M. (2010). Violent video game effects on aggression, empathy, and prosocial behavior in Eastern and Western countries: A meta-analytic review. *Psychological Bulletin, 136*(2), 151–173. https://doi.org/10.1037/a0018251

Anderson, C. A., & Bushman, B. J. (2018). Media violence and the General Aggression Model. *Journal of Social Issues, 74*, 386–413. https://doi. org/10.1111/josi.12275

Antoci, A., Bonelli, L., Paglieri, F., Reggiani, T., & Sabatini, F. (2019). Civility and trust in social media. *Journal of Economic Behavior & Organization, 160*, 83-99. https://doi.org/10.1016/j.jebo.2019.02.026

Bail, C. A., Argyle, L. P., Brown, T. W., Bumpus, J. P., Chen, H., Hunzaker, M. F., ... & Volfovsky, A. (2018). Exposure to opposing views on social media can increase political polarization. *Proceedings of the National Academy of Sciences, 115*(37), 9216-9221. https://doi.org/10.1073/pnas.1804840115

Batson, C. D. (1987). Prosocial motivation: Is it ever truly altruistic?. In *Advances in experimental social psychology* (Vol. 20, pp. 65-122). Academic Press. https://doi.org/10.1016/S0065-2601(08)60412-8

Bennett, W. L., & Iyengar, S. (2008). A new era of minimal effects? The changing foundations of political communication. *Journal of communication, 58*(4), 707-731. https://doi.org/10.1111/j.1460-2466.2008.00410.x

Blitvich, P. G. C. (2022). Moral emotions, good moral panics, social regulation, and online public shaming. *Language & Communication, 84*, 61-75. https://doi.org/10.1016/j.langcom.2022.02.002

Bobbio, A., Nencini, A., & Sarrica, M. (2011). Il Moral Foundation Questionnaire: Analisi della struttura fattoriale della versione italiana. *Giornale di Psicologia, 5*(1), 7-18.

Bobbio, A., & Manganelli, A. M. (2011). Measuring social desirability responding. A short version of Paulhus' BIDR 6. *Testing, Psychometrics Methodology in Applied Psychology, 18*(2), 117-135.

Brody, L. R., & Hall, J. A. (2008). Gender and emotion in context. *Handbook of emotions, 3*, 395-408. https://doi.org.10.4135/9781483346274.n122

Brady, W. J., Wills, J. A., Jost, J. T., Tucker, J. A., & Van Bavel, J. J. (2017). Emotion shapes the diffusion of moralized content in social networks. *Proceedings of the National Academy of Sciences, 114*(28), 7313-7318. https://doi.org/10.1073/pnas.1618923114

Brugnoli, E., Cinelli, M., Quattrociocchi, W., & Scala, A. (2019). Recursive patterns in online echo chambers. *Scientific reports, 9*(1), 1-18. https://doi.org.10.1038/s41598-019-56191-7

Bruns, A. (2017, September). Echo chamber? What echo chamber? Reviewing the evidence. In *6th Biennial Future of Journalism Conference* (FOJ17).

Bruns, A. (2019). It's not the technology, stupid: How the 'Echo Chamber'and 'Filter Bubble'metaphors have failed us. *International Association for Media and Communication Research*.

Burnay, J., Kepes, S., & Bushman, B. J. (2022). Effects of violent and nonviolent sexualized media on aggression-related thoughts, feelings, attitudes, and behaviors: A meta-analytic review. *Aggressive behavior, 48*(1), 111-136. https://doi.org.10.1002/ab.21998

Caprara, G. V., Schwartz, S., Capanna, C., Vecchione, M., & Barbaranelli, C. (2006). Personality and politics: Values, traits, and political choice. *Political psychology, 27*(1), 1-28. https://doi.org/10.1111/j.1467-9221.2006.00447.x

Coe K., Kenski K., Rains S. A. (2014). Online and uncivil? Patterns and determinants of incivility in newspaper website comments. *Journal of Communication, 64*(4), 658–679. http://doi.org/10.1111/jcom.12104

Cinelli, M., Brugnoli, E., Schmidt, A. L., Zollo, F., Quattrociocchi, W., & Scala, A. (2020). Selective exposure shapes the Facebook news diet. *PloS one, 15*(3), e0229129. https://doi.org/10.1371/journal.pone.0229129

Cinelli, M., Morales, G. D. F., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2021). The echo chamber effect on social media. *Proceedings of the National Academy of Sciences, 118*(9). https://doi.org.10.1073/pnas.2023301118

Chung, W., Zeng, D. (2016). Social-media-based public policy informatics: Sentiment and network analyses of U.S. immigration and border security.

Journal of the Association for Information Science and Technology, 67(7), 1588–1606. https://doi.org/10.1002/asi.23449

Clifford, S., & Jerit, J. (2013). How words do the work of politics: Moral foundations theory and the debate over stem cell research. *The Journal of Politics, 75*(3), 659-671. https://doi.org/10.1017/S0022381613000492

Clifford, S., Iyengar, V., Cabeza, R., & Sinnott-Armstrong, W. (2015). Moral foundations vignettes: A standardized stimulus database of scenarios based on moral foundations theory. *Behavior Research Methods, 47*, 1178-1198. https://doi.org.10.3758/s13428-014-0551-2

Clifford, S. (2019). How emotional frames moralize and polarize political attitudes. *Political psychology, 40*(1), 75-91.

Del Vicario, M., Vivaldo, G., Bessi, A., Zollo, F., Scala, A., Caldarelli, G., & Quattrociocchi, W. (2016). Echo chambers: Emotional contagion and group polarization on facebook. *Scientific reports, 6*(1), 1-12. https://www.nature.com/articles/srep37825

D'Errico, F., & Paciello, M. (2018). Online moral disengagement and hostile emotions in discussions on hosting immigrants. *Internet Research*. https://doi.org.10.1108/IntR-03-2017-0119

D'Errico, F., & Paciello, M. (2019). Online moral struggles in hosting immigrant's discourses: The underlying role of expressed anger and socio-cognitive processes. *Journal of language aggression and conflict, 7*(2), 182-209. https://doi.org/10.1075/jlac.00024.der

D'Errico, F. (2020). Humility-Based Persuasion: Individual Differences in Elicited Emotions and Politician Evaluation. *International Journal of Communication (19328036)*, 14

D'Errico, F., Bull, P., Lamponi, E., & Leone, G. (2022). Humility Expression and its Effects on Moral Suasion: An Empirical Study of Ocasio-Cortez's Communication. *Human Affairs, 32*(1), 101-117.

Day, M. V., Fiske, S. T., Downing, E. L., & Trail, T. E. (2014). Shifting liberal and conservative attitudes using moral foundations theory. *Personality and Social Psychology Bulletin, 40*(12), 1559-1573. https://doi.org/10.1177/0146167214551152

Dovidio, J. F. (1984). Helping behavior and altruism: An empirical and conceptual overview. *Advances in experimental social psychology, 17*, 361-427. https://doi.org/10.1016/S0065-2601(08)60123-9

Eisenberg, N., Fabes, R. A., Miller, P. A., Fultz, J., Shell, R., Mathy, R. M., & Reno, R. R. (1989). Relation of sympathy and personal distress to prosocial behavior: a multimethod study. *Journal of personality and social psychology, 57*(1), 55. https://doi.org/10.1037/0022-3514.57.1.55

Feinberg, M., & Willer, R. (2013). The moral roots of environmental attitudes. *Psychological Science, 24*, 56-62. https://doi.org/10.1177/0956797612449177

Feinberg, M., & Willer, R. (2015). From gulf to bridge: When do moral arguments facilitate political influence?. *Personality and Social Psychology Bulletin, 41*(12), 1665-1681. https://doi.org/10.1177/0146167215607842

Feinberg, M., & Willer, R. (2019). Moral reframing: A technique for effective and persuasive communication across political divides. *Social and Personality Psychology Compass, 13*(12), e12501. https://doi.org/10.1111/spc3.12501

Feldman, G. (2021). Personal values and moral foundations: Examining relations and joint prediction of moral variables. *Social Psychological and Personality Science, 12*(5), 676-686. https://doi.org/10.1177/1948550620933434

Fowler, J. H., & Christakis, N. A. (2008). Dynamic spread of happiness in a large social network: longitudinal analysis over 20 years in the Framingham Heart Study. *Bmj, 337*. https://doi.org/10.1136/bmj.a2338

Gentile, D. A., Anderson, C. A., Yukawa, S., Ihori, N., Saleem, M., Ming, L. K., ... & Sakamoto, A. (2009). The effects of prosocial video games on prosocial behaviors: International evidence from correlational, longitudinal, and experimental studies. *Personality and Social Psychology Bulletin, 35*(6), 752-763. https://doi.org/10.1177/0146167209333045

Germani, F., & Biller-Andorno, N. (2021). The anti-vaccination infodemic on social media: A behavioral analysis. *PloS one, 16*(3), e0247642.ù https://doi.org/10.1371/journal.pone.0247642

Gervais, B. T. (2015). Incivility Online: Affective and Behavioral Reactions to Uncivil Political Posts in a Web-Based experiment. J. *Inf. Techn. Polit. 12* (2), 167–185. https://doi.org.10.1080/19331681.2014.997416

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Spassena, K., & Ditto, P. H. (2008). Moral foundations questionnaire. *Journal of Personality and Social Psychology*. https://doi.org/10.1037/a0021847

Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of personality and social psychology, 96*(5), 1029. https://doi.org/10.1037/a0015141

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology, 101*(2), 366–385. https://doi.org/10.1037/a0021847

Graham, J., Nosek, B. A., & Haidt, J. (2012). The moral stereotypes of liberals and conservatives: Exaggeration of differences across the political spectrum. *PLoS ONE, 7*(12), e50092. https://doi.org/10.1371/journal.pone.0050092

Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Moral foundations theory: The pragmatic validity of moral pluralism. In *Advances in experimental social psychology* (Vol. 47, pp. 55-130). Academic Press. https://doi.org/10.1016/B978-0-12-407236-7.00002-4

Greitemeyer, T., & Mügge, D. O. (2014). Video games do affect social outcomes: A meta-analytic review of the effects of violent and prosocial video game play.

Personality and social psychology bulletin, 40(5), 578-589. https://doi.org/10.1177/0146167213520459

Gutierrez, R., & Giner-Sorolla, R. (2007). Anger, disgust, and presumption of harm as reactions to taboo-breaking behaviors. *Emotion, 7*(4), 853. https://doi.org/10.1037/1528-3542.7.4.853

Haidt, J. (2001). The emotional dog and its rational tail: a social intuitionist approach to moral judgment. *Psychological review, 108*(4), 814. https://doi.org/10.1037/0033-295X.108.4.814

Haidt, J. (2003). The moral emotions.

Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus, 133*(4), 55-66. https://doi.org/10.1162/0011526042365555

Haidt, J., & Joseph, C. (2007). The moral mind: How five sets of innate intuitions guide the development of many culture-specific virtues, and perhaps even modules. *The innate mind, 3*, 367-391.

Haidt, J., Graham, J., & Joseph, C. (2009). Above and below left–right: Ideological narratives and moral foundations. *Psychological Inquiry, 20*(2-3), 110-119. https://doi.org/10.1080/10478400903028573

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion.* New York: Vintage.

Horberg, E. J., Oveis, C., & Keltner, D. (2011). Emotions as moral amplifiers: An appraisal tendency approach to the influences of distinct emotions upon moral judgment. *Emotion Review, 3*(3), 237-244. https://doi.org/10.1177/1754073911402384

Herring, S., & Dainas, A. (2017, January). "Nice picture comment!" Graphicons in Facebook comment threads. In *Proceedings of the 50th Hawaii International Conference on System Sciences*. https://doi.org.10.24251/HICSS.2017.264

Hoffman, M. L. (1982). Development of prosocial motivation: Empathy and guilt. In N. Eisenberg (Ed.), *The developmeni of prosocial behavior* (pp. 281-313). New York: Academic Press. https://doi.org/10.1016/B978-0-12-234980-5.50016-X

Hoffman, M. L. (2008). Empathy and prosocial behavior. *Handbook of emotions, 3*, 440-455.

Hoover, J., Johnson, K., Boghrati, R., Graham, J., Dehghani, M., & Donnellan, M. B. (2018). Moral framing and charitable donation: Integrating exploratory social media analyses and confirmatory experimentation. *Collabra: Psychology, 4*(1). https://doi.org/10.1525/collabra.129

Ibrahim, E. N. M., & Ang, C. S. (2018). Communicating empathy: Can technology intervention promote pro-social behavior?—review and perspectives. *Advanced Science Letters, 24*(3), 1643-1646. https://doi.org/10.1166/asl.2018.11127

Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of communication, 59*(1), 19-39. https://doi.org/10.1111/j.1460-2466.2008.01402.x

Jacobson, G. C. (2006). *A divider, not a uniter*. New York: Pearson.
Kam, C. C. S., & Bond, M. H. (2009). Emotional reactions of anger and shame to the norm violation characterizing episodes of interpersonal harm. *British Journal of Social Psychology, 48*(2), 203-219. https://doi.org/10.1348/014466608X324367
Kim, S., & Kim, K. (2021). The Information Ecosystem of Online Groups with Anti- and Pro-vaccine Views on Facebook. arXiv preprint arXiv:2108.06641. https://doi.org/10.48550/arXiv.2108.06641
Kim, J. W., Guess, A., Nyhan, B., & Reifler, J. (2021). The distorting prism of social media: How self-selection and exposure to incivility fuel online comment toxicity. *Journal of Communication, 71*(6), 922-946. https://doi.org/10.1093/joc/jqab034
Kramer, A. D., Guillory, J. E., & Hancock, J. T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of the National Academy of Sciences, 111*(24), 8788-8790. https://doi.org/10.1073/pnas.1320040111
KRC Research (2018). *Civility in America 2018: Civility at Work and in Our Public Squares*. Available at: https://www.webershandwick.com/wp-content/uploads/2018/06/Civility-in-America-VII-FINAL.pdf (Accessed December 14, 2020).
Lawrence, E., Sides, J., & Farrell, H. (2010). Self-segregation or deliberation? Blog readership, participation, and polarization in American politics. *Perspectives on Politics, 8*(1), 141-157. https://doi.org/10.1017/S1537592709992714
Miller, R., & Cushman, F. (2013). Aversive for me, wrong for you: First-person behavioral aversions underlie the moral condemnation of harm. *Social and Personality Psychology Compass, 7*(10), 707-718. https://doi.org/10.1111/spc3.12066
Mutz, D. C. (2006). *Hearing the other side: Deliberative vs. participatory democracy*. New York: Cambridge University Press.
Paciello, M., D'Errico, F., Saleri, G., & Lamponi, E. (2021). Online sexist meme and its effects on moral and emotional processes in social media. *Computers in human behavior, 116*, 106655. https://doi.org/10.1016/j.chb.2020.106655
Pizarro, D. A., Detweiler-Bedell, B., & Bloom, P. (2006). The creativity of everyday moral reasoning. *Creativity and reason in cognitive development*, 81-98. https://doi.org/10.1017/CBO9780511606915.006
Poecze, F., Ebster, C., & Strauss, C. (2018). Social media metrics and sentiment analysis to evaluate the effectiveness of social media posts. *Procedia computer science, 130*, 660-666. https://doi.org/10.1016/j.procs.2018.04.117
Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis: a mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of personality and social psychology, 76*(4), 574. https://doi.org/10.1037/0022-3514.76.4.574
Schwartz, S. H. (2007). Basic human values: Theory, measurement, and applications. *Revue Française de Sociologie, 47*, 249–288.

Schwartz, S. H., Caprara, G. V., & Vecchione, M. (2010). Basic personal values, core political values, and voting: A longitudinal analysis. *Political psychology, 31*(3), 421-452. https://doi.org/10.1111/j.1467-9221.2010.00764.x

Schwartz, S. H. (2017). *Individual values across cultures*.

Weber, C. R., & Federico, C. M. (2013). Moral foundations and heterogeneity in ideological preferences. *Political Psychology, 34*(1), 107-126. https://doi.org/10.1111/j.1467-9221.2012.00922.x