

Online Gendered Violence and Visibility in Electoral Autocracies: Evidence from Parliamentary and Local Elections in Türkiye

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Abstract

Online platforms have become indispensable tools for political candidates to gain visibility, particularly for female candidates in electoral autocracies who often lack access to traditional networks, party hierarchies, and media platforms. We argue that online visibility, while a resource for female candidates, disproportionately exposes them to online violence that functions as a mechanism of political control, reinforcing patriarchal exclusion from the political sphere. Our analysis draws on nearly four million tweets directed at 1,834 candidates across the 2023 parliamentary and 2024 local election campaigns in Türkiye, providing a rare opportunity to observe how these dynamics unfold at both the national and subnational levels. We find that while online visibility increases abuse for all candidates, the effect is markedly stronger for female candidates. Moreover, female candidates are disproportionately targeted across diverse types of violence, including profanity, demeaning and ridiculing offensive speech, physical threats, and ethnic hate speech. Also, our results suggest that in local elections, where candidates rely more heavily on personalized campaigns, increases in visibility are more strongly associated with female candidates' exposure to online violence.

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Introduction

Online platforms have become central arenas for electoral politics, enabling candidates to build visibility, mobilize supporters, and bypass traditional gatekeepers (Boulianne, 2020; Vaccari & Valeriani 2021). They are especially valuable for female politicians, who often rely on social media to overcome gendered barriers in traditional party organizations and media environments (Osei-Appiah et al. 2023; Flavia et al. 2025). Yet these platforms may also reproduce entrenched patriarchal norms and gender stereotypes, exposing female candidates to harassment and abuse from the public (Collignon and Rüdiger 2020; Håkansson 2021; Erikson et al. 2021). Thus the very spaces that create opportunities for female politicians may also serve as additional arenas of victimization, paradoxically discouraging their participation.

Despite growing research on online violence against women in politics, we still know relatively little about how such violence unfolds during election periods—precisely when online platforms become most consequential for electoral competition. This gap is especially pronounced in electoral autocracies, where weak democratic institutions, constrained media landscapes, and patriarchal party structures shape the conditions of political competition (Schedler 2002; Diamond 2002). These constraints significantly narrow women’s access to conventional campaigning avenues, making digital platforms one of the few accessible arenas for building visibility, engaging voters, and pursuing electoral viability (IFES 2018; Cardo 2021; Osei-Appiah et al. 2023; Chilwa 2023; Matsilele & Nkoala 2023). Yet existing research has rarely examined how this dependence shapes their exposure to online harassment. Most evidence on visibility and online abuse against women comes from Western or established democracies such as the U.K. (Gorrell et al. 2020), Sweden (Håkansson 2021), and Canada (Rheault et al. 2019), leaving open questions about how online violence operates in electoral autocracies with

weaker protections and whether women face more intense abuse than men during elections in such settings.

We argue that for female candidates, online visibility is not a neutral attribute but a direct challenge to entrenched gender expectations. Research in social psychology and feminist theory demonstrates that women in prominent public roles are often perceived as violating norms of modesty, deference, and limited public voice, which provokes hostility (Krook and Restrepo Sanín 2016; Bardall 2013; Puwar 2004). Whereas male politicians' prominence typically signals credibility and leadership, women's visibility is more likely to trigger backlash in the form of personal, sexualized, and hate-based attacks (Rheault et al. 2019; Håkansson 2021; Erikson et al. 2021). These dynamics may be especially pronounced in electoral autocracies, where elections magnify the importance of public visibility for political viability, but weak institutional protections leave women disproportionately vulnerable to online harassment. Such harassment can be seen as a gendered form of political exclusion, reflecting backlash against women who transgress symbolic gender boundaries, and ultimately contributing to the suppression of their political voice.

We evaluate this argument using data from the 2023 parliamentary and 2024 local election in Türkiye, examining how candidates' visibility influences their exposure to online harassment on X (formerly Twitter). As an electoral autocracy marked by shrinking civic space, patriarchal norms, and structural advantages for incumbents (Ugur-Cinar, 2023), Türkiye provides a critical case for studying these dynamics. We analyze both parliamentary and local elections to test our theoretical argument across electoral contexts that differ in levels of candidate personalization. Because parliamentary contests are more party-centered while local elections are more candidate-centered, this design allows us to assess whether gendered exposure

to online violence is conditional on the institutional and social environment of electoral competition.

Our dataset includes more than 3.9 million tweets directed at 1,834 candidates across both campaigns. We measure online offensive and hate speech using a supervised machine-learning pipeline based on the United Nations definition of hate speech (United Nations 2020, pp 7-8). Tweets are first classified as offensive or non-offensive, then disaggregated by type of offense (physical threats, profanity, demeaning language, and ridicule). Offensive content is further classified as hate speech and, when applicable, categorized by targeted identity such as religion and ethnicity. We capture digital visibility through follower counts, which signal the reach of a candidate's audience and exposure to both supporters and detractors (Rheault et al. 2019) and control for a variety of factors such as incumbency which may relate to both visibility and the likelihood of receiving offensive or hate speech.

The results show that, while greater visibility in social media increases the likelihood of online abuse for all candidates, its effects are disproportionately severe for women. Across both elections, female candidates experience sharper increases in offensive and hate speech as their follower counts rise. Disaggregated by type of abuse, women are targeted not only with physical threats, ridicule, sexualized insults, and demeaning language, but also with identity-based attacks rooted in ethnicity. These effects are significantly larger in the local elections, where candidate-centered and socially proximate competition facilitates more individually-oriented, forms of online abuse. Moreover, partisan affiliation shapes these dynamics: female candidates from the Green-Left Party (YSP/DEM) face substantially higher levels of online violence than their male counterparts or women from other parties, reflecting not only the party's central role as the electoral representative of the Kurdish political movement but also its strong commitment

to gender representation, which heightens their visibility and exposes them to intersecting forms of ethnic and gendered abuse.

This paper aims to make several contributions. First, it advances scholarship on violence against women in politics by demonstrating how digital visibility functions as both a resource and a liability, enhancing their competitiveness while simultaneously exposing them to disproportionate abuse. Whereas existing research primarily frames online platforms as empowering opportunities for women in politics (Osei-Appiah et al. 2023; Flavia et al. 2025), this study extends that perspective by showing that digital visibility is inherently double-edged, simultaneously strengthening electoral prospects while amplifying vulnerability to online harassment. Second, by analyzing nearly four million tweets across two recent Turkish elections, the study provides rare large-scale evidence from an electoral autocracy, helping to address a literature that remains heavily centered on Western democracies (Rheault et al. 2019; Collignon and Rüdig 2020; Erikson et al. 2021). Third, methodologically, the study advances research on online harassment by refining existing approaches (Rheault et al. 2019; Erikson et al. 2021; Holm et al. 2024) that rely on relatively simple measures of abusive content, and instead differentiating types of offensive and hate speech using supervised machine-learning techniques. Together, these findings resonate with the emerging literature highlighting the broader democratic costs of gendered online violence: silencing individual women, deterring others from entering politics, and reinforcing exclusionary norms about who belongs in the political sphere in the context of electoral autocracy.

Digital Pathways to Political Participation for Women in Electoral Autocracies

In electoral autocracies, where formal institutions are weakly institutionalized and traditional media often face state control, online platforms provide an alternative sphere for political participation. Digital media lowers the costs of engagement, enabling citizens to access information, mobilize, and voice their preferences even when conventional avenues are constrained (Boulianne 2020; Vaccari and Valeriani 2021). Although governments attempt to control online spaces, the accessibility and horizontal structure of social media still expand opportunities for political expression (Gunitsky 2015). In this sense, online platforms function as partial substitutes for restricted offline participation in electoral autocracies, making them crucial sites for political activity.

These participatory benefits extend particularly to women, who face layered barriers to political engagement in less democratic contexts. Patriarchal party structures, limited media representation, and constraints on mobility mean that women are often disregarded in formal political arenas. Online platforms, however, help reduce these disadvantages by providing relatively low-cost, flexible, and less restricted means of communication (IFES 2018; Cardo 2021). For example, during Thailand's 2020 pro-democracy protests, Twitter provided a relatively accessible space for young women activists to articulate grievances and construct collective action frames in a politically restrictive context (Sinpeng, 2021). Also, South African female politicians use "metavoicing" and trust-building strategies on social media to enhance their credibility and visibility outside mainstream media (Matsilele and Nkoala 2023). Likewise, women in Nigeria, Ghana, and other electoral contexts leverage online advocacy and generate

higher user engagement than men (Yarchi and Samuel-Azran 2020; Chilwa 2023). These cases illustrate how digital campaigning allows women to bypass male-dominated party infrastructures and connect directly with citizens.

Women's reliance on digital platforms in electoral autocracies may stem not only from restricted access to traditional media and male-dominated party structures, but also from gendered expectations that shape how women's political behavior is interpreted. Social Role Congruity Theory (Eagly & Karau 2002) argues that prejudice arises when women occupy roles that are stereotypically associated with masculine traits, creating a perceived mismatch between gender norms and role expectations. In contexts where public authority is coded as masculine and women are expected to remain modest and deferential, female candidates face heightened scrutiny, fewer opportunities within party networks, and limited media coverage. Digital platforms therefore become especially valuable for women, providing alternative channels to build visibility, and communicate with voters outside institutions shaped by patriarchal norms.

Beyond lowering participation barriers, digital platforms also provide women with both symbolic and substantive forms of representation. Online visibility enables women to occupy public space, articulate policy priorities, and introduce perspectives that are often marginalized in traditional political arenas, thereby broadening the scope of political discourse (Osei-Appiah et al. 2023). Specifically, research shows that women's digital engagement not only increases their descriptive presence but also expands substantive representation by enabling them to raise gendered issues, mobilize supporters, and shape political debates in ways that are less feasible offline (IFES 2018; Yarchi & Samuel-Azran 2020; Cirimele et al. 2025). Such visibility thus contributes to women's ability to influence agendas and participate more fully in political life.

Online Visibility, Gender, and the Conditional Politics of Online Violence

While scholarship has shown the critical importance of social media for women to engage in effective political participation, a growing body of work increasingly points to the possibility that online visibility also heightens exposure to criticism, harassment, and threats. Research on political violence argues that such forms of abuse can distort core democratic functions by raising the costs of participation, constraining officeholders' behavior, and undermining political representation (Phillips 1995; Krook 2020; Krook and Restrepo Sanín 2020). Yet existing work leaves open important questions about the conditions under which these vulnerabilities emerge and the actors most likely to bear their consequences.

A growing body of scholarship suggests that the risks associated with online visibility may not be evenly distributed across candidates. Many studies find that women politicians experience higher levels of harassment than comparable men and are subjected to distinct forms of abuse—often sexualized, gendered, or identity-based—that can depress political ambition, harm well-being, and disrupt political engagement (Collignon and Rüdiger 2020; Håkansson 2021; Erikson et al. 2021). At the same time, empirical evidence on gender differences remains mixed, with some studies reporting little to no systematic gender gap in overall exposure to online harassment (Rheault et al. 2019; Gorrell et al. 2020; Holm et al. 2024). Taken together, these findings suggest that gendered exposure to online violence is likely conditional—shaped by political context, platform dynamics, and moments of heightened visibility—rather than a uniform empirical regularity.

Several scholars further argue that online abuse is not merely incidental but may reflect deeper resistance to women's political authority, functioning as a mechanism of boundary

enforcement that punishes perceived violations of gendered expectations of leadership (Bardall 2013; Krook and Restrepo Sanín 2016). These dynamics may become particularly salient during election periods, when candidates face strong incentives to cultivate visibility in order to remain competitive and when political competition intensifies public scrutiny and online engagement. However, existing evidence on how electoral periods condition the relationship between visibility, gender, and online violence remains limited. As a result, it is still unclear whether—and how—the gendered consequences of online visibility systematically vary across electoral arenas and institutional settings.

An additional limitation of existing research on visibility and online violence is that it has been disproportionately concentrated in established democracies—contexts characterized by relatively stronger gender equality norms, more independent media environments, and institutional protections that differ in important ways from those found in hybrid or authoritarian regimes (Pacilli and Mannarini 2019; Rheault et al. 2019; Erikson et al. 2023; Southern and Harmer 2021; Gorrell et al. 2020). Moreover, relatively few studies explicitly theorize or empirically examine how women’s digital visibility during election periods shapes their vulnerability to online abuse, even though elections are moments when candidates’ reliance on digital campaigning is likely to intensify (Gorrell et al. 2020; Holm et al. 2024).⁶ As a result, we have limited systematic evidence on whether and under what conditions visibility-related penalties emerge during elections in political environments where civic space is constrained, patriarchal norms are entrenched, and institutional protections for women are comparatively weak.

⁶ Holm et al. (2024) provides rare insight into online electoral violence in an emerging democracy (Tunisia) but focuses only on comments on candidates’ public Facebook pages and measures visibility indirectly through list placement rather than candidates’ actual digital prominence.

Campaigns, Visibility and Online Gendered Violence in Electoral Autocracies

To understand why women may face heightened exposure to online violence during election campaigns, it is useful to treat visibility itself as the analytical starting point. Building on Social Role Congruity Theory, which links backlash to perceived misalignments between gendered expectations and role occupancy (Eagly and Karau 2002), political visibility can be understood as a potentially gendered signal of authority and public presence rather than a neutral increase in exposure. Feminist scholarship similarly argues that women who enter highly visible political roles may be evaluated against entrenched norms of modesty, deference, and limited public presence (Bardall 2013; Puwar 2004; Krook and Restrepo Sanín 2016). Appearing publicly as a political actor—particularly in the heightened visibility of electoral campaigns—may therefore be interpreted as a symbolic challenge to patriarchal role expectations, creating conditions under which backlash and norm-enforcing forms of online abuse become more likely .

This transgression activates predictable patterns of backlash. Theories of role incongruity and gender backlash suggest that women in positions of authority provoke hostility because their behavior conflicts with stereotypes of femininity, which prescribe warmth and subordination rather than power and leadership (Rudman et al. 2012). Whereas men’s visibility in politics typically signifies competence and credibility (Håkansson 2021), women’s visibility is more likely to be read as illegitimate or threatening. Online abuse thus operates as a social sanction: a way of policing symbolic boundaries, disciplining women who transgress, and reasserting patriarchal hierarchies (Richardson-Self 2021, Collignon and Rüdiger 2020; Håkansson 2021; Erikson et al. 2021). From this perspective, online violence should not be seen as random

incivility but as an instrument of control that reinforces exclusionary norms about who belongs in politics.

The double standard in how visibility is interpreted becomes especially consequential in electoral autocracies. Elections are moments when visibility is most essential: candidates must be seen and heard to be electorally viable. Yet women face a paradox. To compete effectively, they must cultivate a strong online presence, but in doing so, they expose themselves to disproportionate abuse. This tension is intensified in electoral autocracies, where elections serve as instruments of regime legitimation but still generate meaningful incentives for candidates to mobilize supporters (Schedler 2002; Diamond 2002). In such contexts, visibility becomes both indispensable and uniquely precarious. Patriarchal institutions remain entrenched, democratic protections are weak, and online harassment is pervasive and weakly regulated.

Scholars have increasingly conceptualized social media as a political arena that may simultaneously expand opportunities for participation while introducing new forms of risk. From this perspective, digital platforms can enable women to circumvent traditional party hierarchies and mainstream media gatekeepers, potentially allowing them to engage voters more directly and assert political credibility. At the same time, these same platforms may lower the costs of disseminating gendered and misogynistic content, creating new vulnerabilities alongside these opportunities (Theocharis et al. 2016; Collignon and Rüdiger 2020). Existing studies from a range of contexts suggest that heightened visibility can expose women to disproportionate and often more personalized forms of harassment, though the extent and intensity of these dynamics appear to vary across political settings (Rheault et al. 2019; Southern and Harmer 2021; Bardall 2013).

Taken together, these dynamics illustrate our central argument: as women become more visible during elections, they also become more vulnerable to online violence than their male

counterparts. Elections heighten the value of digital presence, yet weak institutions and entrenched patriarchal norms magnify its risks. Women cannot compete without cultivating visibility, but cultivating visibility exposes them to disproportionate abuse. This paradox lies at the heart of the gendered politics of digital campaigning in weak democracies. Visibility is not merely a resource; it is also a liability, one that disproportionately burdens women and undermines their democratic representation.

Türkiye as the Electoral Context for Online Gendered Violence

Electoral Autocracy and Gender Dynamics in Türkiye

Electoral campaigns in Türkiye provide a valuable context for examining the gendered dynamics of online political violence. Türkiye is classified by the Varieties of Democracy (V-DEM) as an electoral autocracy,⁷ where competitive elections are maintained but constrained by shrinking civic space and weakened opposition rights, and one with entrenched patriarchal norms regarding gender roles (Ugur-Cinar 2023, Dalay and Toremark 2024). This combination makes Türkiye an especially illuminating case for studying how political visibility interacts with online harassment under conditions that blend electoral contestation with authoritarian governance.

In Türkiye, these dynamics unfold in a political environment where women's access to political visibility is already structurally constrained within party politics and electoral competition. Women remain persistently underrepresented among elected officials: following the 2023 parliamentary elections, only 118 of 593 members of parliament were women (19.9%) (IPU Parline 2024). This imbalance is evident even at the candidacy stage. Roughly one in four

⁷ According to V-Dem's Electoral Democracy Index (<https://v-dem.net>), Türkiye has recorded scores below 0.4 since 2015.

parliamentary candidates in 2023 were women, no woman ran for the presidency, and women received limited visibility during the campaign (OSCE/ODIHR 2023). Similar patterns persist at the local level. After the 2024 local elections, women held only 11 of 81 provincial mayoralities, underscoring the difficulty of translating candidacy into executive authority and sustained public visibility (Reuters 2024).

Beyond formal political institutions, women's public presence in mainstream media is also limited and often shaped through gendered frames. A study of Turkish primetime television news found that 33% of news scripts contained no women, and that when women did appear they were frequently represented as background or instrumental figures, or in family-coded roles rather than as authoritative political actors (Erzurum 2013). Against this backdrop, social media platforms provide a comparatively accessible arena for female candidates to generate visibility outside party and media gatekeeping.

Electoral Cases: The 2023 Parliamentary and 2024 Local Elections

We focus on Türkiye's two most recent elections: the parliamentary election in May 2023 and the local election in May 2024. The parliamentary elections in May 2023 were among the most consequential in Türkiye's recent history. Marking the centennial of the Republic, they pitted incumbent President Recep Tayyip Erdoğan and his ruling Justice and Development Party (AKP) against the Republican People's Party (CHP) candidate Kemal Kılıçdaroğlu and a broad opposition coalition. Erdoğan secured re-election in a contested second-round presidential vote, while the AKP-led People's Alliance retained its parliamentary majority. These elections underscored both the persistence of electoral competition and the structural advantages enjoyed by incumbents in hybrid regimes. For female candidates, the high stakes and national visibility of

the campaign created intensified exposure to online scrutiny, making the election a critical case for analyzing gendered patterns of harassment.

Additionally, the 2024 local elections provide an important complement to the national contest by shifting the level of competition to subnational politics. Local elections in Türkiye are highly salient, particularly in major metropolitan municipalities such as Istanbul, Ankara, and Izmir, which serve as platforms for opposition parties to challenge the ruling bloc. In 2024, the main opposition Republican People's Party (CHP) achieved a historic victory, winning control of many municipalities such as Bursa and Balıkesir and signaling resilience despite the national-level dominance of the AKP (Silverman 2024).

Analyzing both parliamentary and local elections is central to our theoretical argument rather than a purely descriptive choice. These two electoral arenas differ systematically in the degree to which competition is party-centered versus candidate-centered, and in the extent to which candidates are embedded in local social networks. Parliamentary elections in Türkiye are largely structured around party lists and national leaders, with individual candidates given less attention. Local elections, by contrast, are more personalized and socially proximate, heightening the salience of candidates' individual characteristics and public recognition.

These institutional differences generate certain expectations regarding the relationship between candidate visibility and gendered exposure to online violence. In parliamentary elections, the party-centered structure and national framing of competition are likely to dampen the extent to which individual candidates' visibility translates into personalized targeting, limiting the role of gender as a focal point for online abuse. In contrast, local elections place candidates in closer and more continuous interaction with local audiences, increasing personal visibility and activating gendered norms about appropriate political behavior and leadership. As

a result, heightened visibility in local elections is more likely to expose female candidates to personalized and norm-enforcing forms of online political violence. We therefore expect the effect of visibility on online violence against women to be larger in local elections than in parliamentary elections.

In contrast to these election-specific dynamics, we expect party affiliation to shape gendered exposure to online violence in a more consistent manner across electoral contexts. Gendered political violence and sexist beliefs are largely shaped by their intersection with other social identities, including race (Hawkesworth 2003; Krook 2020) and partisanship (Cassese and Barnes 2019; Junn and Masuoka 2021). In the Turkish context, candidates from the Green Left Party (YSP, later DEM)—especially women—are likely to face systematically higher levels of hostile online targeting in both parliamentary and local elections. This heightened vulnerability stems from the party’s distinctive political positioning along both ethnic and gendered dimensions. As the principal electoral representative of the Kurdish political movement, the YSP/DEM is embedded in a long history of securitization, criminalization, and stigmatization, exposing its women candidates to ethnic and security-oriented forms of online abuse. For example, the arrests and imprisonment of prominent Kurdish women politicians such as Sebahat Tuncel, Gültan Kışanak, Ayla Akat Ata, and Selma Irmak illustrate the broader securitization and criminalization of pro-Kurdish political representation in Turkey (Dirlik 2016). At the same time, the party’s explicit commitment to gender equality, institutionalized through practices such as co-leadership structures and gender quotas, elevates the political visibility of female candidates and may provoke backlash against women’s prominence within a party that openly challenges patriarchal norms.

Political Communication through X in Türkiye

Our analysis draws on tweets mentioning candidates' official X handles during the campaign periods for each election. Although survey evidence indicates a preference for platforms such as YouTube and Instagram for news consumption among ordinary Turkish citizens (Reuters Institute 2024), X nevertheless occupies a distinctive position as a central arena for political elites, journalists, activists, and politically attentive citizens, giving it an outsized role in shaping the daily political agenda (Sobaci & Karkin 2013; Akdenizli 2015). X's critical role in Turkish election campaigns has been documented since the early 2010. Metropolitan mayoral candidates have made frequent use of the platform for campaign communications (İkiz et al. 2014), and research shows that X is the platform on which prominent political leaders in Türkiye have historically accumulated the largest followings relative to other social media platforms (Dari 2018). Platform audience metrics underscore this "influential minority" character: data from X's advertising resources indicate roughly 19.7 million users in Türkiye in early 2025, suggesting that while X is smaller than mass-usage platforms such as Facebook, it remains a consequential arena for election-period political contention (Kemp 2022).

Our own data are consistent with these findings, confirming that X remains salient for political interactions between politicians and the public. During the parliamentary elections, nearly 70% of candidates maintained active X accounts, defined as publicly accessible accounts that had posted at least once during the time of data collection. The total number of posts from these accounts exceeded eight million, with a median of 4,735 posts per account. The number of times these accounts were mentioned in tweets analyzed by our models was approximately 3.74 million, with a median of roughly 300 mentions per account.

It is possible that toxicity on X increased after Elon Musk’s 2022 acquisition of the platform, given the subsequent rollback of content moderation and abuse-prevention measures framed as efforts to promote free speech (Hickey et al. 2023). But research suggests that similar shifts in platform governance have also occurred on Meta-owned platforms including Facebook and Instagram, suggesting that expectations of increased online hostility are not platform-specific (The Guardian 2023; AP News 2023). Moreover, studies documenting these tendencies have largely focused on English-speaking contexts, where the political symbolism surrounding Elon Musk’s ownership may carry greater salience than in Türkiye. So while heightened exposure to offensive content on X warrants careful consideration, the size of X’s user base and its prominence in elite political communication renders it an analytically appropriate site for examining the dynamics of online political violence in the Turkish electoral context.

Research Design

Data Collection

We collected data on online violence against electoral candidates and their account characteristics—including follower count, following count, and tweet count—at two points in time: September 2023, approximately four months after the parliamentary election, and May–June 2024, a few weeks after the local election. For both elections, the universe of candidates was identified using the official candidate lists published by the Yüksek Seçim Kurulu (YSK), Türkiye’s Supreme Election Board (<https://www.ysk.gov.tr/>). We then identified candidates’ X handles through two independent workflows designed to minimize misidentification. First, we conducted candidate-by-candidate web searches combining each

candidate's full name and manually reviewed the most plausible results. Second, an independent research assistant conducted a separate manual search directly through the X interface. The two lists were subsequently cross-checked and reconciled, with discrepancies resolved through manual inspection.

For each retained account, we verified authenticity using profile- and content-level indicators consistent with an official campaign presence. These indicators included alignment between the account name and username, biographical information and profile imagery, links to official party or campaign pages where available, and campaign-relevant posts referencing the candidate's party affiliation and electoral district. When multiple plausible accounts existed or identification remained ambiguous, we excluded the candidate rather than risk including a same-name user, parody, or impersonation account. Because our design relies on publicly observable interactions, the final sample includes only accounts that were publicly accessible at the time of collection; protected, deleted, suspended, or otherwise unavailable accounts were not included.

The time frame of analysis was selected to reflect campaign dynamics. For local elections, data collection covers the final three months prior to election day, as mayoral candidacies in Turkey are often formalized relatively late and candidates rarely engage in active campaigning before official nomination, whereas parliamentary candidates frequently begin campaigning earlier, justifying a longer six-month window. To address concerns about campaign duration and temporal consistency, we replicate all analyses using a three-month window for both elections; the results are reported in Appendix 5. Finally, all statistical models include controls for time to account for temporal variation in exposure and ensure that the estimated effects are not driven by differences in the timing of online activity.

Tweets referencing the candidates were gathered at a time when academic access to the platform's official API had become highly restricted. To address these constraints, recent computational studies have relied on the Nitter web interface (Alzahrani & AlGhamdi 2025; Ortiz et al. 2025). Nitter is an open-access, privacy-oriented alternative front end that allows researchers to access and extract publicly available content from X without requiring authenticated API access. Employing Nitter facilitates the systematic and reproducible collection of public political communication while minimizing exposure to platform-imposed access limitations and algorithmic personalization effects. Because collection occurred after the elections, some offensive or abusive content may have been deleted by users or removed through platform enforcement prior to retrieval. We therefore interpret observed levels of abusive content as conservative lower bounds and discuss the implications of moderation-related missingness in the limitations section below.

The dataset includes a total of 3,656,433 tweets from the 2023 Turkish parliamentary election and 321,394 tweets from the 2024 local elections. For the parliamentary election, we collected tweets directed at 954 parliamentary candidates, comprising 553 men and 401 women. These candidates received 3,229,023 tweets mentioning male candidates and 427,410 tweets mentioning female candidates. For the local elections, the dataset covers 880 mayoral candidates, including 423 men and 457 women, with 132,156 tweets directed at male candidates and 189,238 tweets directed at female candidates. This indicates that, while male candidates attracted the majority of online attention in the 2023 parliamentary election, the pattern reversed in the 2024 local elections, where female candidates received more tweets than their male counterparts. These descriptive differences reflect variation in patterns of online attention across electoral contexts rather than a selection mechanism specific to candidate gender.

Categorizing Online Offensive and Hate Speech

Following much of the existing literature on online political violence, the core analytical task of this study is to categorize tweets that reference electoral candidates as containing either offensive or hateful language. At a broad level, we understand offensive speech as language intended to insult, demean, or intimidate, and hate speech as language that targets individuals or groups on the basis of protected identity characteristics. At the same time, we recognize that this task is fraught with significant conceptual and empirical challenges. Definitions of offensive and hateful speech are contested, context dependent, and often difficult to operationalize in a consistent and transparent manner.

Our study examines the extent to which tweets directed at electoral candidates during the campaign period contain such forms of violent language. Offensive and hateful speech represent one category of online violence against women in politics, alongside other forms such as cyberstalking, sexual harassment, doxing, intimate image abuse, and disinformation (Krook 2020). Language intended to cause offense can function as a means of attacking and intimidating female candidates, while sexist and misogynist tropes may also be deployed as implicit “dog whistles,” enabling harassment while maintaining plausible deniability on the part of perpetrators. Detecting both explicit and implicit forms of abuse requires analytical models that are sensitive to cultural, political, and linguistic context. It also requires a conceptual framework that is sufficiently flexible to capture the multidimensional nature of offensive and hateful speech, yet sufficiently precise to generate categories that are clearly delimited, robust, and practically applicable as document labels. In light of this conceptual diversity, we construct a

multi-layered ontology of offensive and hateful speech that encompasses multiple types within each category of violence.

For our overarching definition of hate speech, we draw on the working definition provided by the United Nations Strategy and Plan of Action on Hate Speech, which defines hate speech as “any kind of communication in speech, writing or behaviour, that attacks or uses pejorative or discriminatory language with reference to a person or a group based on who they are, in other words, based on their religion, ethnicity, nationality, race, colour, descent, gender or other identity factor” (United Nations 2020, pp. 7–8). This definition highlights two core dimensions that guide our classification framework: the type of offense (including attacks, discriminatory language, and pejorative expressions) and the identity factors targeted (such as gender, ethnicity, race, or religion).

Our ontology treats these dimensions as modular and analytically distinct, combining them to form comprehensive clusters of offensive and hateful speech. Rather than relying on a single, all-encompassing detection model, we develop separate classification tools for each component of the broader constructs of offensive and hate speech. The following section presents the specific categories used in our analysis, along with illustrative examples drawn from the dataset.⁸

Offensive speech: Words or phrases that are intended to assault, threaten, insult, ridicule, or belittle a particular group, individual, or institution.

- a) **Physical-harm:** *Language that threatens or incites physical violence or serious harm to an individual or group, including calls for persecution or repression that deprives targets of rights.*
- b) **Insult-profanity:** *language that insults individuals, groups or through obscenities and/or language considered morally repugnant.*

⁸ Additional details on the annotation procedures and examples of the different types of online violence are provided in Appendix 1.

- c) **Insult-demeaning:** *language that demeans, degrades, or belittles a targeted individual or group's personality, moral values, or humanity. Discriminatory language falls within this category.*
- d) **Insult-ridicule:** *language that mocks, ridicules, or shames individuals, groups. While such language may appear harmless among familiar settings, in public, it can function as bullying and cause harm.*

Hate speech: *Any offensive language, as defined above, that targets an individual or social group based on their identity, such as their gender, ethnicity, race, or religion.*

- a) **Hate-gender:** *Offensive speech targeting gender identity. Includes sexist or discriminatory language such as gender stereotyping.*
- b) **Hate-religion:** *Offensive speech targeting individuals or groups based on their beliefs. Includes disparaging individuals for their (non-)religiosity, alleged heresy, or membership in a faith or denomination are included.*
- c) **Hate-ethnicity:** *Offensive speech targeting individuals or groups based on their ethnic, cultural, or national identity.*

Using these interrelated concepts as the ontology in automatic detection has several advantages. First, it delimits different levels of objectivity by involving categories that depend on explicit intent (such as insult, or threat), or less explicit innuendos or dog-whistles in categories (demeaning and mocking). Secondly, categories of offense also align hierarchically for different intensities of offense, from physical threat at the apex to simple mockery at the bottom, enabling more complex analyses such as those linking levels of violence with social group differentiation. Finally, independently detecting all categories of speech targeting gender, religious, or ethnic identities and combining all of them in the comprehensive category of hate speech meant no identity group against whom there existed actual instances of hate speech were excluded from the definition.

The supervised models were trained and tested on a gold-standard corpus (GSCs) containing 4000 documents sampled from the tweets posted before the relevant election that contain candidate handles. Gold-standard-corpora are high-quality training datasets that contain documents annotated by at least two humans, in accordance with an annotation scheme that is

pre-defined and tested to ensure a high level of accuracy and consistency (Hürriyetoğlu et. al. 2021). In our research design, GSC documents were sampled from the target dataset of tweets that mentioned electoral candidates in a way that normalizes party and gender distributions to minimize selection bias.

Because the distribution of candidates is highly imbalanced across political parties and between genders, a purely random draw from the tweet pool would have disproportionately captured highly visible male politicians, resulting in a skewed training set that underrepresents less prominent candidates. To address this concern, we first selected equal or near-equal numbers of candidates across major political parties and gender groups. From the tweets mentioning this pre-selected set of candidates, we then randomly sampled 3,000 tweets to form the initial training dataset.⁹ This balanced sample was annotated by three graduate students of social sciences from Koç University based on our annotation manual.¹⁰ The annotators were trained on the ontology of offensive and hateful speech by the domain expert, who then supervised the annotation process via weekly meetings with the annotators. To assure the gold-standard quality of the training data, each of the tweets in the 4000 strong set was labeled by two annotators. The instances where the annotators disagreed were adjudicated by the domain expert. The agreed-upon and adjudicated labels became the final labels of the annotation process on whose basis the machine learning models were trained. This method of annotator training, regular annotation meetings alongside double-annotation proves a reliable method of assuring

⁹ During the annotation process, the initial randomly sampled set did not produce enough offensive and hateful speech instances to train the models. To increase the number of relevant instances to be annotated, an additional set of 1075 documents were selected by a simple, recall-optimized hate speech detection model trained on a dataset, labeled by a large language model prompted to apply our ontology (Topçu et al. 2024). The same annotation team labeled this additional set, ending up with enough instances of offensive and hate speech categories to train the classification models.

¹⁰ See Appendix 1 for more details regarding the online offensive/hate speech annotation manual.

inter-coder reliability. On average, the agreement performance between annotators were monitored and found to be over 95%.

The GSC was then used to train the hate speech and offensive speech classification models by fine-tuning a pretrained transformer model on the Turkish language (Turkish BERT Model).¹¹ The F1 macro scores yielded by the offensive speech and hate speech classification models were 0.70 (0.73 precision macro, and 0.69 recall macro), and 0.77 (0.88 precision macro and 0.71 recall macro) respectively. These values, although could be improved by increasing the training data size, were found to be moderate to high compared to the state-of-the-art existing in the literature about English language models (Fortuna & Nunes 2018; Alkomah & Ma 2022). The model errors were evaluated to see whether models had systematic bias, particularly in the case of hate speech models where there was a discrepancy between the recall and precision scores. Based on the error analysis, no systematic bias against candidate groups were observed along political party or gender lines. As a result, while the total number of tweets was much larger during the 2023 parliamentary election, the 2024 local election saw a higher proportion of abusive content. In the parliamentary campaign, 492,329 tweets (15.56%) were coded as offensive and 81,424 (2.28%) as hate speech out of 3,656,433 tweets. By contrast, in the local campaign, 51,386 tweets (19.03%) were classified as offensive and 13,639 (4.43%) as hate speech from a total of 321,394 tweets.

Online Visibility of Electoral Candidates

We use X follower counts as a direct indicator of visibility. Follower counts capture the size of a candidate's potential audience and shape the likelihood that their posts will be circulated,

¹¹ See <https://huggingface.co/dbmdz/bert-base-turkish-128k-cased> for more details about the Turkish BERT Model.

debated, or attacked. In electoral contexts where X functions as a key site of political communication, follower counts reflect both the reach of a candidate's message and the intensity of public attention directed toward them (Rheault et al. 2019). This measure is particularly relevant for analyzing online abuse, since a greater number of followers increases exposure not only to supporters but also to critics, trolls, and partisan opponents. Operationalizing visibility in this way embeds the concept within the very platform where harassment occurs, ensuring conceptual and empirical alignment.

Alternative indicators of digital visibility—such as incumbency status or the volume of tweets produced by a candidate's account—could also plausibly capture aspects of public exposure. Incumbency, for instance, is often associated with higher name recognition and media attention, while tweet counts reflect a candidate's level of online activity and engagement. For this reason, our statistical models incorporate incumbency and tweet volume as control variables to account for these potential sources of exposure. However, both measures have important limitations in the present context. Incumbency is a coarse, institutionally defined attribute that does not map cleanly onto platform-specific visibility and varies substantially in its relevance across national and local electoral arenas. Tweet volume, in turn, conflates exposure with behavior: candidates who post frequently are not necessarily more visible to broader audiences, and high tweet counts may reflect strategic communication styles or resource constraints rather than public attention. Moreover, neither incumbency nor posting frequency directly captures the size of the audience that can potentially encounter, amplify, or target a candidate's online presence. By contrast, follower counts provide a platform-native measure of visibility that reflects accumulated audience reach and structures the likelihood of both engagement and harassment, making them better suited for analyzing gendered exposure to online political

violence. Nevertheless, we include these variables as controls in order to isolate the effect of follower count, our key theoretical variable of interest.

In our datasets, the visibility variable—measured by candidates’ follower counts on X—is highly skewed in both elections. In the 2023 parliamentary election, follower counts range from as few as 3 to over 6.9 million, with a mean of 67,301, reflecting a small number of highly visible candidates alongside a majority with modest audiences. For example, only Süleyman Soylu had more than three million followers among parliamentary candidates. A similar pattern emerges in the 2024 local elections, where follower counts range from 0 to 1.15 million, with a substantially lower overall mean of 6,169. Only two mayoral candidates—Meral Daniş Beştaş and Erkan Baş—exceeded 500,000 followers. To assess the sensitivity of our findings to this skewness, we replicate the analyses excluding candidates in the upper and lower 5 percent of the follower-count distribution; the results are reported in Appendix 6.

Control Variables

Because exposure to online harassment may be influenced by candidates’ patterns of activity and political status, our models include controls for online engagement and incumbency. Specifically, we account for communication intensity by including the number of tweets posted during the campaign period, as well as the number of accounts followed to capture differences in platform use and network participation. In the 2023 parliamentary models, we additionally control for incumbency status, given that office-holders may attract distinct forms of attention and criticism.¹² All variables are measured at the individual level and appropriately rescaled for interpretability.

¹² In the local election models, the incumbency variable was not available because the official candidate rosters do not provide reliable information on candidates’ incumbent status (<https://www.ysk.gov.tr/>).

Temporal closeness to election day represents another crucial factor influencing candidate visibility and online abuse. As campaigns intensify, candidates experience a surge in attention, with social media interactions peaking in the final weeks before voting. Controlling for the timing of tweets relative to election day allows us to separate general patterns of online violence from dynamics specifically tied to the electoral calendar. In this way, our analysis accounts for the cyclical rhythms of campaigning that affect candidates' visibility and vulnerability in the digital sphere. We measure this variable on a daily basis and rescale it in 30-day units to facilitate substantive interpretation in the statistical models.

Finally, we control for party affiliation in our main analyses to account for baseline ideological differences across candidates. Party labels in Türkiye capture meaningful variation in political orientation and electoral positioning that may shape exposure to online harassment independently of candidate visibility. Following the discussion above, we then examine party-based differences in the effects of visibility on online violence in a separate set of analyses, allowing us to assess how the relationship between visibility and online harassment varies across parties rather than absorbing these differences through controls alone.

Results

We begin by assessing the baseline relationship between candidate gender and exposure to online violence. Tables 1 and 2 report estimates from logistic regression models predicting offensive and hate speech directed at candidates in Turkish elections. Table 1 presents results from the 2023 parliamentary election (Models 1–4), while Table 2 reports findings from the 2024 local elections (Models 5–8). Across both sets of models, we evaluate the effects of gender and online

visibility on the probability of receiving offensive or hate speech, controlling for a range of covariates. The results reveal no uniform gender effect across electoral contexts. Averaged effects indicate that during the 2023 parliamentary election (Models 1 and 3), women were less likely than men to be targeted, with a lower 6.85 percentage probability of offensive speech and a 1.06 percentage lower probability of hate speech. In contrast, the 2024 local elections (Models 5 and 7) display the opposite pattern, with female candidates facing higher risks of abuse, including increases of 1.86 percentage in offensive speech and 0.15 percentage in hate speech.

These findings are consistent with the theoretical expectations outlined above and help clarify previously mixed evidence in the literature. While prior studies report divergent results regarding gender differences in online harassment (Håkansson 2021; Erikson et al. 2021; Collignon and Rüdiger 2020; Rheault et al. 2019; Gorrell et al. 2020; Holm et al. 2024), our results show that gendered exposure is contingent on electoral context. In Türkiye's party-centered parliamentary elections, attention is directed primarily toward parties rather than individual candidates, reducing the salience of gender as a basis for targeting. In contrast, the more candidate-centered and locally embedded nature of municipal elections increases personal visibility and activates localized gender norms, thereby heightening women's vulnerability to personalized and norm-enforcing abuse. These patterns support the argument that gendered online violence is conditional rather than uniform, varying systematically across electoral arenas.

Table 2. Logistic Regression Models on Online Violence in 2023 Parliamentary Election

	<i>Offensive Speech</i>		<i>Hate Speech</i>	
	Model 1	Model 2	Model 3	Model 4
Female	-0.617*** (0.006)	-0.746*** (0.008)	-0.512*** (0.014)	-0.603*** (0.019)
Follower Count (100K)	0.008*** (0.0001)	0.008*** (0.0001)	0.004*** (0.0002)	0.004*** (0.0002)
Female × Follower Count		0.056*** (0.002)		0.036*** (0.005)
Following Count (100K)	3.436*** (0.039)	3.393*** (0.039)	5.366*** (0.077)	5.339*** (0.077)
Tweet Count (100K)	0.082*** (0.011)	0.107*** (0.011)	-0.617*** (0.022)	-0.602*** (0.022)
Time to Election (1 Month)	-0.01*** (0.001)	-0.011*** (0.001)	-0.082*** (0.003)	-0.084*** (0.003)
Incumbency	0.196*** (0.004)	0.174*** (0.004)	0.606*** (0.009)	0.591*** (0.010)
(Intercept)	-2.191*** (0.004)	-2.190*** (0.004)	-4.098*** (0.009)	-4.096*** (0.009)
Party Fixed Effects	O	O	O	O
AIC	2470787	2470206	657876	657825
BIC	2470930	2470362	658019	657981
Log Likelihood	-1235382	-1235091	-328927	-328900
Deviance	2470765	2470182	657854	657801
Num. obs.	3278887	3278887	3278887	3278887

Note: Logistic regression models for both elections were estimated using glm in R.
 *** p<0.001; ** p<0.01; * p<0.05.

Table 2. Logistic Regression Models on Online Violence in 2024 Local Election

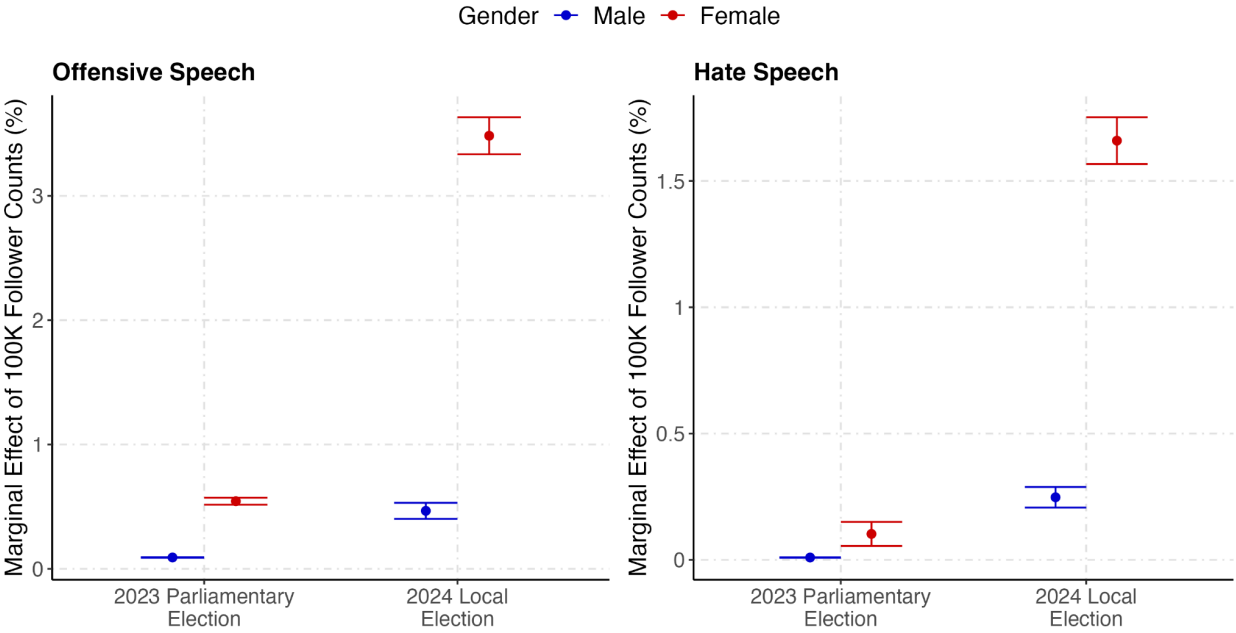
	<i>Offensive Speech</i>		<i>Hate Speech</i>	
	Model 5	Model 6	Model 7	Model 8
Female	0.145*** (0.012)	-0.025 (0.013)	0.058** (0.022)	-0.161*** (0.024)
Follower Count (100K)	0.083*** (0.002)	0.039*** (0.003)	0.144*** (0.005)	0.069*** (0.006)
Female × Follower Count		0.235*** (0.007)		0.282*** (0.013)
Following Count (100K)	-0.640*** (0.002)	-0.435** (0.159)	-3.612*** (0.589)	-3.140*** (0.578)
Tweet Count (100K)	0.405*** (0.034)	0.065 (0.036)	0.189* (0.074)	-0.358*** (0.081)
Time to Election (1 Month)	0.135*** (0.006)	0.123*** (0.006)	0.162*** (0.011)	0.502*** (0.035)
(Intercept)	-1.894*** (0.015)	-1.792*** (0.015)	-2.914*** (0.024)	-2.780*** (0.024)
Party Fixed Effects	O	O	O	O
AIC	254747	253679	100953	100471
BIC	254949	253892	101155	100683
Log Likelihood	-127354	-126819	-50457	-50215
Deviance	254709	253639	100915	100431
Num. obs.	307433	307433	307433	307433

Note: Logistic regression models for both elections were estimated using glm in R.
 *** p<0.001; ** p<0.01; * p<0.05.

Despite these contextual differences, a consistent pattern emerges regarding the role of online visibility. Across both electoral settings, increases in visibility have a significantly stronger effect on women’s likelihood of experiencing offensive and hate speech than on men’s. We capture these gender-differentiated dynamics using interaction terms between gender and online visibility in the logistic regression models. In the 2023 parliamentary election, the interaction terms in Models 2 and 4 of Table 1 are positive and statistically significant, indicating that visibility amplifies women’s risk of receiving both offensive and hate speech to a greater

extent than it does for men. The same pattern appears in the 2024 local elections, where the interaction terms in Models 6 and 8 of Table 2 are likewise positive and statistically significant.

Figure 1. Online Visibility and Gender Differences in Online Violence



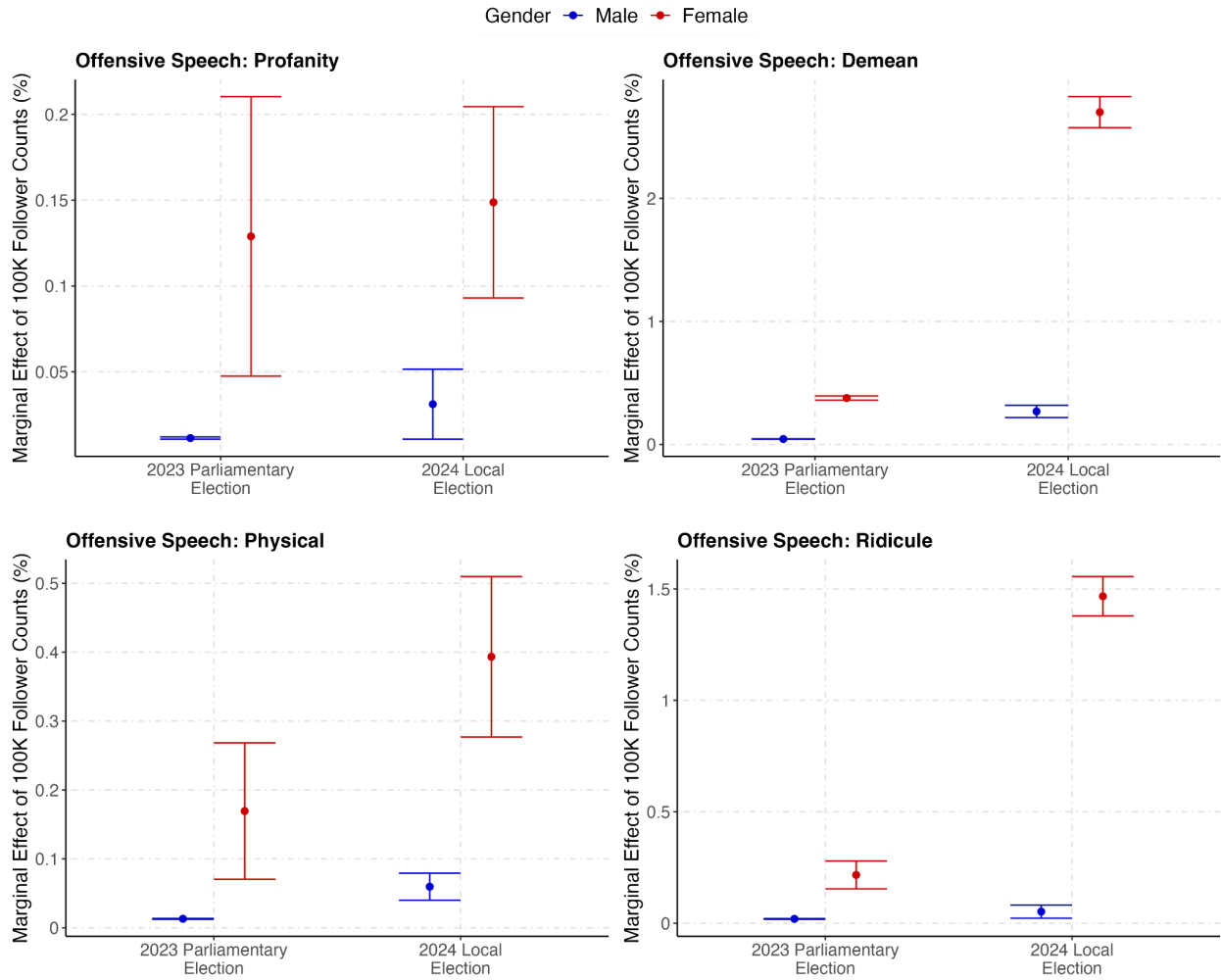
Note: Error bars in the coefficient plots represent 95% confidence intervals.

Figure 1 illustrates these results by plotting predicted probabilities derived from the regression models. Based on average marginal effects calculated over the observed sample, a one-hundred-thousand-follower increase during the 2023 parliamentary election raises the probability of offensive speech by 0.09 pp for men but by 0.54 pp for women, and increases hate speech by 0.01 pp for men compared to 0.1 pp for women. Evidence from the 2024 local elections reinforces this pattern: the same increase in followers is associated with a 0.47 pp rise in offensive speech for men versus a substantially larger 3.48 pp increase for women, and a 0.25

pp increase in hate speech for men compared to 1.66 pp for women. Overall, these findings demonstrate that while online visibility generally intensifies exposure to online violence, its effects are systematically and disproportionately concentrated among female candidates across electoral contexts.

Moreover, as shown in Figure 2, the gendered effects of online visibility are consistent across multiple forms of offensive speech. While the estimated average marginal effects of a one-hundred-thousand-follower increase are small and often negligible for men, they are substantially larger for women. In the parliamentary election, profanity increases only marginally for men (0.01 pp) but rises more noticeably for women (0.13 pp), and demeaning speech grows more than ten times as much for women (0.38 pp) as for men (0.04 pp). These gender gaps widen further in the local election, where profanity reaches 0.0015 for women compared to 0.03 pp for men, and demeaning speech surges to 2.7 pp for women versus 0.27 pp for men. A similar pattern emerges for physical threats, which increase modestly for men but far more sharply for women—0.01 pp versus 0.17 pp in the parliamentary election and 0.06 pp versus 0.39 pp in the local election. Also, across both elections, increases in ridicule-related offensive speech are modest for men but substantially larger for women—0.02 pp versus 0.22 pp in the parliamentary election and 0.05 pp versus 1.47 pp in the local election. Taken together, these findings indicate that online visibility disproportionately amplifies women’s exposure to all forms of offensive speech, with particularly pronounced effects in the local election context.

Figure 2. Online Visibility and Gender Differences across Offensive Speech Types

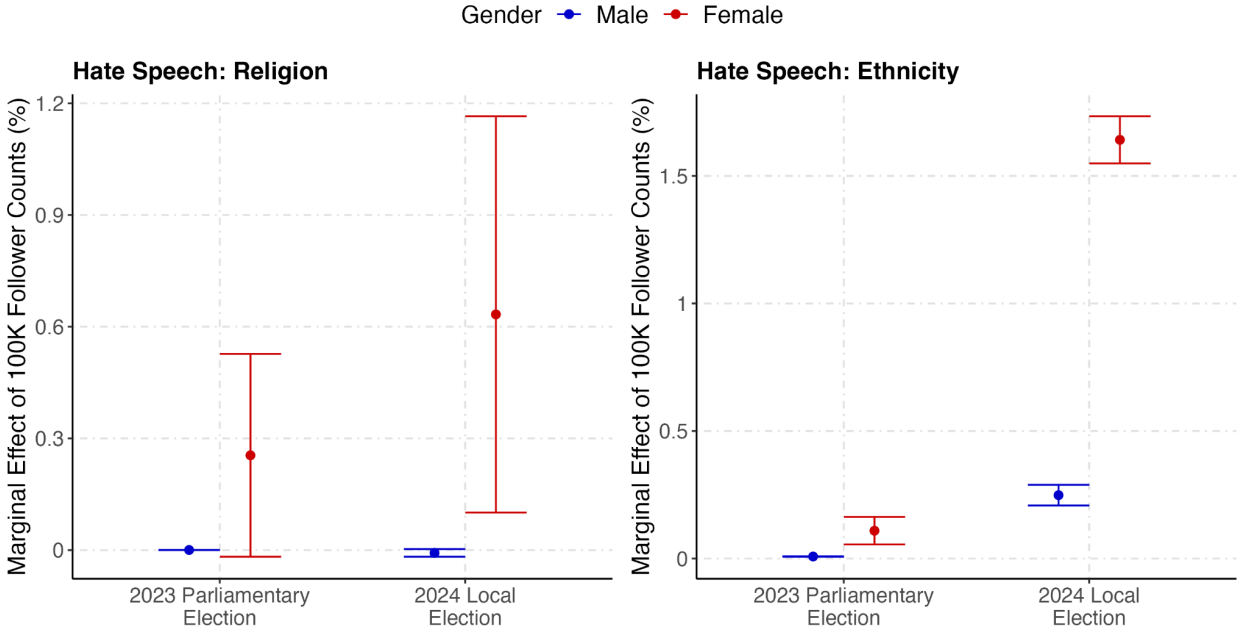


Note: Error bars in the coefficient plots represent 95% confidence intervals.

Additionally, Figure 3 shows that the gendered consequences of online visibility extend to identity-based hate speech across religious and ethnic dimensions, with particularly pronounced effects for ethnic-based hate speech. In the parliamentary election, a one-hundred-thousand-follower increase corresponds to a 0.25 pp increase in religious hate speech targeting women, while the estimated effect for men is negligible (0.0004 pp). In the local election, the same increase is associated with a 0.63 pp rise for women, whereas the effect for

men is small and negative (-0.007 pp). Ethnic-based hate speech exhibits substantially larger gender disparities. In the parliamentary election, women experienced a 0.11 pp increase compared to 0.008 pp for men, while in the local election women’s exposure rose sharply by 1.64 pp, far exceeding the 0.25 pp increase observed for men. Taken together, these findings indicate that increased online visibility disproportionately exposes women to intersectional forms of hate.

Figure 3. Online Visibility and Gender Differences across Hate Speech Types

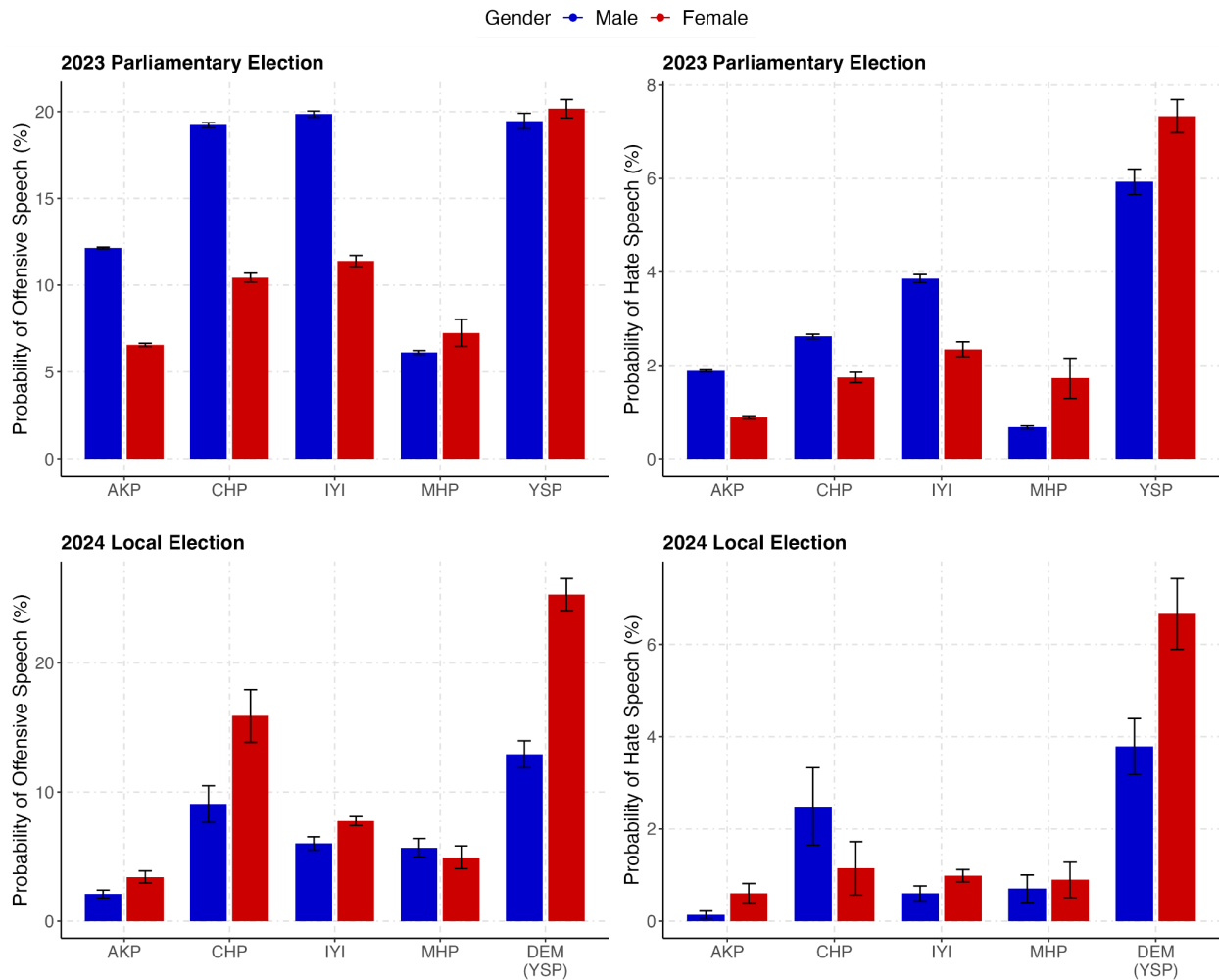


Note: Error bars in the coefficient plots represent 95% confidence intervals.

Next, we examine how party affiliation shapes gendered patterns of online violence. As shown in the first row of Figure 4, gender differences in predicted probabilities of online abuse during the parliamentary election vary across parties, with female candidates from the Green Left

Party (YSP) standing out as facing particularly disproportionate levels of hostility. For offensive speech, YSP women (20.17 pp) rank among the most targeted, far surpassing women in AKP (6.56 pp), CHP (10.44 pp), İYİ (11.40 pp), or MHP (7.25 pp). The pattern is similar in hate speech, where YSP women exhibit the highest predicted probability (7.34 pp), exceeding not only YSP men (5.93 pp) but also women across AKP (0.88 pp), CHP (1.74 pp), İYİ (2.34 pp), and MHP (1.72 pp). These results underscore that while men tend to attract more abuse overall in several parties, YSP women are exceptional in receiving consistently higher levels of predicted hate and offensive speech compared to women in all other parties.

Figure 4. Candidate Partisanship and Gender Differences in Online Violence



Note: Error bars in the coefficient plots represent 95% confidence intervals.

The local election analysis reinforces this pattern of heightened vulnerability among YSP/DEM women. Female candidates in DEM display a predicted probability of 6.66 percentage for hate speech, a figure that not only almost doubles that of DEM men (3.79%) but also eclipses all other parties’ female candidates, such as AKP (0.6%), CHP (1.14%), İYİ (0.98%), and MHP (0.89%). Thus, while the incidence of online violence differs across parties, the gap between DEM women and their counterparts—both across gender and across party lines—is consistently stark. In terms of offensive speech, DEM women (25.28%) are by far the most exposed, facing almost double the rate of DEM men (12.92%) and well beyond the levels

predicted for women in other parties, such as AKP (3.42%), CHP (15.88%), İYİ (7.75%), and MHP (4.94%).

These findings indicate that female candidates affiliated with the YSP/DEM face a particularly acute form of exposure to online hostility, consistent with the mechanisms outlined earlier. When heightened vulnerability within this party cannot be attributed to a single source, but instead reflects the convergence of multiple, reinforcing dynamics. Patterns of abuse directed at YSP/DEM women frequently extend beyond generic sexist attacks to incorporate frames associated with political loyalty, security, and ethnic belonging, pointing to the salience of the Kurdish issue in structuring online hostility. At the same time, consistent with findings that digital platforms often reproduce entrenched gender stereotypes and intensify gendered scrutiny of female politicians (Collignon and Rüdig 2020; Håkansson 2021; Erikson et al. 2021), their heightened visibility appears to activate norm-enforcing reactions that seek to delegitimize both their political authority and their public presence.

Across a series of robustness checks, our findings consistently indicate that candidate visibility has a stronger association with online violence directed at women than at men. As reported in Appendix 5, we replicate the regression analyses after excluding tweets directed at candidates at the upper and lower ends of the visibility distribution (top and bottom 5 percent based on follower counts), and the results remain similar to those of the main analysis. In addition, adjusting the temporal scope of the analysis does not materially alter our conclusions. As shown in Appendix 6, for the 2023 parliamentary election, we shorten the observation window from six months to three months and continue to observe statistically significant visibility effects for women relative to men.

Conclusion

This study shows that online visibility during election campaigns operates as a conditional political resource whose costs are distributed unevenly across male and female candidates. Drawing on nearly four million tweets directed at candidates in the 2023 parliamentary and 2024 local elections in Türkiye, an electoral autocracy in which elections remain meaningful but media access and political competition are uneven, we demonstrate that increased online visibility is associated with greater exposure to offensive and hate speech for all candidates, with markedly steeper effects for women. These gendered visibility penalties appear across multiple forms of abuse, including ridicule, demeaning language, threats, and identity-based hate targeting ethnicity and religion. These patterns are especially pronounced among women affiliated with parties that occupy marginalized positions within the broader political landscape and explicitly promote gender equality. As candidates' audiences grow, visibility expands political reach while simultaneously increasing women's vulnerability to online hostility.

These findings extend existing research on gender-based online political violence in several important ways. Prior studies show that women in political life face more frequent and severe online incivility than men, and that public prominence further heightens exposure to such abuse (Rheault et al. 2019; Krook 2020; Krook and Restrepo Sanín 2016; Gorrell et al. 2020; Holm et al. 2024). Building on theories of role incongruity and gender backlash (Eagly and Karau 2002; Rudman et al. 2012; Puwar 2004), we show that gendered harassment scales systematically with visibility during election campaigns, when incentives for exposure and political stakes are especially high.

By comparing national and local elections and incorporating partisan affiliation as a structural source of visibility, we demonstrate that visibility penalties vary across electoral arenas and organizational contexts, with particularly strong effects in local elections where competition is more personalized. In particular, our results show that female candidates affiliated with the YSP/DEM experience particularly intense online hostility due to the convergence of gendered, ethnic, and security-based stigmatization, reflecting both the securitization of Kurdish politics and backlash against women's visible leadership in a patriarchal political environment. Examining these dynamics in Türkiye—an electoral autocracy where elections remain meaningful but media access and institutional protections are constrained—highlights how regime and candidate characteristics, along with electoral context, shape the relationship between digital visibility and political vulnerability, suggesting that gendered harassment may intensify where electoral competition and public exposure coexist with weakened safeguards.

Several limitations point to directions for future research. First, measuring online violence through handle-based mentions captures direct and public targeting of candidates but does not account for abuse occurring in private messages or through less visible practices such as coordinated harassment or disinformation campaigns. Second, while follower counts offer a transparent and readily observable indicator of candidates' public visibility, they capture only one dimension of a broader visibility construct. Other aspects of visibility—such as the extent to which candidates' messages are responded to, circulated, or otherwise engaged with, as well as the reach of campaign-related content—may also shape exposure to online harassment. Third, although this study leverages two elections within the same national context, comparative research across countries and regime types would help clarify how broadly the visibility penalties identified here could extend beyond Türkiye. Longitudinal research in addition could

shed light on how repeated exposure to online harassment shapes campaign strategies and female candidates' decisions to enter or exit politics.

Finally, the results have implications for policies related to platform governance. Existing research demonstrates that platform design choices and moderation practices shape both the scale of such abuse and its political consequences (Citron 2014; Gillespie 2018). In the absence of effective intervention, online harassment can deter candidacies, constrain campaign behavior, and normalize intimidation as a political tactic (DiMeco 2021). The findings here point to the need for more robust and proactive measures to check abuse and for the consistent enforcement of safeguards against harassment, especially during election campaigns when visibility is most consequential. Strengthening these protections would help ensure that digital platforms do not reproduce gendered hierarchies and would move social media closer to realizing its potential as a more inclusive arena for women's political access, voice, and participation.

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