



ARTICLE



<https://doi.org/10.1057/s41599-024-04118-7>

OPEN

Contrasting strategies and messages: an in-depth comparative study of Albania's national and municipal election advertisements

Lorena Licenji¹ & Julian Hoxha²

The present article examines and compares the diverse online electoral advertising strategies employed by the Socialist Party (PS) and the Democratic Party (PD) in Albania's national and municipal elections. The purpose of this study is to analyze the themes, communication techniques, and tones used in campaign advertising and to evaluate how these components vary depending on the type of election and the political party participating. It focuses on discrepancies in tone, themes, and the priority placed on candidate image versus policy issues. This research uses content analysis methods to reveal significant differences in the content and strategies of electoral advertisements across various election types and political parties. The study highlights clear disparities in the political communication tactics used in national and municipal elections, as well as between the Socialist and Democratic Parties. This study's findings reveal differences in advertising content and strategies across national and municipal elections for Democratic and Socialist parties. This has significant implications for political groups, advertising, and lawmakers, particularly given the increasing impact of social media on citizen participation in the democratization process.

¹ Liberal Arts Department, American University of the Middle East, Egaila 54200, Kuwait. ² College of Engineering and Technology, American University of the Middle East, Egaila 54200, Kuwait. ✉email: Lorena.Licenji@aum.edu.kw; Julian.Hoxha@aum.edu.kw

Albania's electoral campaign evolution and political context

The evolution of Albanian election campaigns reflects the political, social, and technological transformations that have occurred in the country since the introduction of political plurality in the 1990s. The fall of the communist government in 1991 triggered a political transformation, leading to the formation of new political structures and democratic establishments. The first pluralist elections in Albania took place in 1991, characterized by anomalies and the significant influence of the former communist party, which had rebranded itself as the Socialist Party (PS). As the initial opposition party, the Democratic Party (PD) emerged as a prominent political entity during this period (Biberaj 2023, p. 47). Public rallies, face-to-face meetings, and the distribution of printed promotional materials dominated electoral campaigns as Albania transitioned from a one-party system to a democratic society (Misha 2002, p. 55). During this time, media was predominantly under state control, with independent media only beginning to emerge (Kalemaj 2005, p. 243).

The 1997 collapse of pyramid schemes in Albania caused a profound national crisis that extended beyond financial issues, marking a pivotal moment in the nation's contemporary history. A significant number of Albanians suffered substantial financial losses, leading to widespread social dissatisfaction and political instability. This collapse eroded public trust, heightened social tensions, and contributed to the disintegration of governmental institutions. Violence and anarchy proliferated nationwide, underscoring the fragility of Albania's fledgling democratic processes and revealing critical weaknesses within its political framework. In the aftermath, election campaign discourse increasingly focused on the need to restore stability, rebuild institutions, and address the socioeconomic divides exacerbated by the crisis (Jusufović 2021; Vickers and Pettifer 1997, p. 129).

Electoral campaigns underwent significant structural and organizational advancements during the 2001 and 2005 elections. Political parties began utilizing media platforms, such as television and radio, to disseminate their messages and broaden their reach (Londo 2008, p. 102). The role of free and independent media became increasingly significant as private television and radio gained popularity (Abazi 2013, p. 14).

Albania's political landscape remains dominated by established parties, with notable antagonism between the Socialist and Democratic parties. The advent of the internet and social media significantly transformed political campaigns, reshaping their structure and tactics. Campaigns in Albania have traditionally focused on major issues such as economic development, corruption, and EU integration. Both the Socialist Party, which advocates social-democratic and progressive policies, and the Democratic Party, which promotes conservative and center-right ideologies, strategically craft their messages around these themes, often employing populist rhetoric to appeal to a broad voter base.

Since 2013, election campaigns have incorporated tactics like targeted advertising, data analytics, and grassroots mobilization. Grassroots initiatives, involving direct voter outreach and community engagement, play a crucial role in garnering support (Jusufović 2021). Political parties in Albania increasingly rely on data-driven methods to identify and connect with key voter segments. Platforms like Facebook, YouTube, and Twitter became essential tools for political communication during the 2013 and 2017 elections, although traditional media, including television, radio, and print newspapers, continued to wield significant influence (Çani 2017, p. 215).

Political leaders not only maintained a digital presence on these platforms but also drew attention in mainstream media, thus expanding their reach. In this context, both Edi Rama of the

Socialist Party and Lulzim Basha of the Democratic Party effectively capitalized on the opportunities offered by social media throughout the campaign.

The COVID-19 epidemic and the consequent restrictions, which included bans on public meetings, led to a significant transformation in political campaigns. The 2021 election cycle witnessed a notable shift into the internet domain, highlighting the increasing significance of social media in political campaigns. In the 2021 Albanian parliamentary elections, the Socialist Party of Albania, under the leadership of Prime Minister Edi Rama, achieved a substantial victory by obtaining 74 seats out of the total 140 in Parliament. The Socialist Party secured a third straight term in government by garnering over 50% of the votes. The primary competitor, the center-right Democratic Party, secured 39% of the vote and obtained 59 seats. Following the 2021 elections, the United States government officially designated former Prime Minister and longstanding Democratic Party (DP) leader Sali Berisha as a *persona non grata*, leading to a division within the DP. The internal conflict led to disagreements over the DP's legal representation, prompting the formation of the "Alliance Together We Win" as a strategic reorganization to address the crisis. The formation of the "Alliance Together, We Win" in 2023 serves as a prime example of parties intentionally uniting to consolidate power and increase their chances of success in elections. Parties frequently establish these coalitions in response to internal conflicts or larger election tactics aimed at maximizing voter support (Biberaj 2023). The coalition's formation and its financial backing for campaigns reflect the growing trend of adopting digital campaign strategies in response to Albania's shifting political landscape.

From 2021 to 2023, electoral campaigns in Albania underwent a major shift toward digital platforms, underscoring the evolving landscape of political advertising and communication. The use of these platforms in the 2021 national and 2023 local elections demonstrated their strategic effectiveness in engaging and mobilizing voters, particularly among younger demographics. Facebook and YouTube have emerged as essential tools for political outreach, mirroring global trends. By 2023, the role of social media had grown considerably, complementing traditional media, such as television and newspapers, as primary channels for political communication. Increased investment in digital marketing has become a key factor influencing the development of election campaigns. In the 2021 election, the Socialist Party led the digital campaign, allocating substantial financial resources to both digital and traditional media. Meanwhile, the Democratic Party increased its budget for social media while maintaining similar expenditures on conventional media.

The 2023 campaign primarily centered on the major political parties, particularly the Socialist Party and the "Together We Win" coalition. In 2023, the Socialist Party, led by Prime Minister Edi Rama, secured a significant victory, winning 50 out of Albania's 61 municipalities. The party emerged as the favorite in major cities, including Tirana. Meanwhile, the "Together We Win" alliance succeeded in only 11 of the 61 municipalities. According to OSCE data for 2023, Facebook remains the leading social network in Albania, with 28 of 44 political parties actively present on the platform. The Democratic Party and the Socialist Party had the largest followings, with approximately 328,000 and 204,000 followers, respectively. Politicians' Facebook pages gained widespread popularity throughout the campaign. Among the 39 party leaders with official accounts, Prime Minister Rama leads with 1.62 million followers, followed by Mr. Berisha, who has 1.12 million. Political parties managing electoral campaigns have recognized the critical role of social media in engaging voters, particularly younger demographics, despite various challenges. They swiftly adapted to the demands of the digital age, using

diverse strategies to expand their reach and influence within a rapidly evolving political and technological landscape. The history of election campaigns in Albania reflects a steady progression toward modernization and the integration of new technologies, while addressing the complexities that come with technological and social advancements

Introduction

During election campaigns, electoral advertising has a significant impact on public sentiment and voter behavior (Goldstein and Freedman 2002). In Albania, as in many other countries, political parties employ a range of strategies to attract voters in both national and municipal elections. This research aims to compare the advertising tactics used by the Socialist Party and the Democratic Party in Albania during the 2021 national election and the 2023 municipal election. Specifically, it examines each party's unique qualities, content, communication strategies, and thematic elements. The 2021 national election and the 2023 municipal election provide a valuable framework for comparative research, especially regarding the nuanced content and communication tactics of electoral advertisements within Albania's distinct political context during these years.

This study applied an adapted version of Benoit's functional theory of political campaign discourse (Benoit 1997, 2003) to analyze the objectives and content of 212 online video advertisements supporting candidates and national parties in the 2021 and 2023 campaigns. A total of 53 advertisements from the Democratic Party and 53 from the Socialist Party were analyzed for each election year. The functional theory suggests that campaign discourse addresses two main topics: policy and character. Benoit and Compton (2014) argue that candidates can campaign on what they do and who they are. Notably, policy and character are interrelated aspects of the professionalized campaign process (Hacker et al. 2000; Strömbäck 2007, p. 7). According to Benoit, campaign communications strategically craft messages to acclaim, attack, or defend policies and/or character traits. This framework aids in identifying and distinguishing the themes and topics in advertisements from Albania's 2021 national election and 2023 municipal election.

The functional theory of campaigns offers a valuable framework for classifying and analyzing the nuances of political advertising. Originally developed for television spots, this theory posits that elections are inherently comparative, leading politicians to craft campaign narratives that position them as more appealing alternatives to their opponents.

This study examines several core hypotheses:

Hypothesis 1 posits that the Socialist Party (PS) and the Democratic Party (PD) emphasize different themes in their electoral ads for national and municipal elections.

Hypothesis 2 suggests that the use of formal, informal, and mixed communication styles in electoral advertisements differs significantly between the Socialist Party and the Democratic Party, as well as between different election types.

Hypothesis 3 proposes that there is a significant difference in the focus on candidates' image versus policy or themes: national election ads tend to emphasize the candidate's "image," whereas local elections prioritize "issues."

Hypothesis 4 suggests that the Socialist Party tends to favour "positive-acclaim" tones in their advertisements, while the Democratic Party is more likely to use "negative" and "comparative" tones.

Hypothesis 5 posits that the two parties employ different thematic appeals, with the Democratic Party more frequently using "emotional appeals" and the Socialist Party favouring "logical appeals."

This study aims to investigate the following research questions to identify differences and trends in Albanian political communication during the 2021 and 2023 elections:

RQ 1: What are the differences in thematic topics, advertisement tones (positive-acclaim, negative-attack, and comparative), and communication styles between the electoral ads of the Socialist Party and the Democratic Party in national and local elections? What do these differences reveal about each party's strategic emphasis and communication approaches?

RQ 2: How does the emphasis on a candidate's image over policy or thematic content vary between national and local elections, and how does this emphasis align with the strategic campaign approaches of the Socialist and Democratic Parties?

RQ 3: How do the Socialist Party and the Democratic Party differ in their use of credibility, emotional, and logical appeals in national and municipal election campaigns?

This research aims to uncover and explain significant disparities in the strategies these political parties employ. The following sections will provide an in-depth analysis of these topics, offering a comprehensive overview of the Albanian election advertising landscape during the 2021 and 2023 elections

Literature review

Political advertising plays a pivotal role in shaping public opinion and influencing voter behavior toward candidates, parties, or specific issues (Brownstein 2008; Jackson et al. 2000; Sides and Karch 2008; West 2017). It spans various formats, including television, radio, print, and increasingly, online and social media platforms. Since the 1990s, politicians have integrated the Internet into their campaigns, following its broad adoption by the public (Fowler et al. 2021; Lilleker and Jackson 2013). The internet allows political candidates and parties to efficiently gather financial resources, mobilize supporters, and disseminate their messages at a lower cost compared to traditional media, while also bypassing potential biases in mainstream political journalism.

According to Kaid (2002), political advertising encompasses a wide array of materials and serves diverse objectives, from distributing positive messages that emphasize a candidate's credentials and achievements to using negative messages to undermine opponents by scrutinizing their record or character. Effective political communication aims to capture public attention, remain timely, and convey concise, impactful ideas. It also relies on repeating key points and using slogans and keywords to reinforce messages (Fowler et al. 2021).

Researchers increasingly note the challenge of distinguishing ads focused on policy issues from those emphasizing candidates' personal traits. Historically, policy views were regarded as substantive stances reflecting political preferences, while personal attributes contributed to a candidate's public image (Kaid and Johnston 1991). However, this distinction has become more complex as political advertising language and style have evolved, attracting scholarly attention across both traditional media (like television and radio) and new digital platforms (Ballotti and Kaid 2000; Jamieson 1988; Atkinson 1984).

Linguistic studies in political communication offer valuable insights into the strategic construction of messages to attract voters (Sikanku 2022). Gunsch et al. (2000) found that positive advertisements typically use less formal language and cognitive vocabulary, creating an optimistic outlook by highlighting future possibilities and current successes. Conversely, negative ads often focus on the past, emphasizing opponents' weaknesses or failures, with a tone that often conveys anger or disdain. These tonal and content variations reflect deliberate choices by campaign teams to shape voter perceptions, underscoring the complexity of political

communication. Positive ads work to construct an optimistic narrative around a candidate's potential and achievements, while negative ads aim to create doubt about opponents by questioning their records or character. The effectiveness of these techniques can significantly influence the political landscape, shaping voter perceptions around both policy and personal character. Today, as voters spend less time watching television, they increasingly engage with political campaigns on internet platforms (Kaid and Postelnicu 2005).

Digital platforms have become essential communication channels, enabling political candidates, parties, and interest groups to express and elaborate on their views on significant social issues. Political advertisements on digital media serve a strategic purpose beyond simple promotion. These materials are meticulously crafted to showcase the strengths, accomplishments, and unique attributes of the candidates, while also drawing comparisons with other candidates. This dual approach aims to highlight each candidate's merits and provide voters with valuable perspectives, helping them make informed decisions by emphasizing contrasts in policies, ideologies, and leadership qualities.

Benoit's analysis of presidential advertising trends reveals an increase in attack ads, noting that winners typically favor positive messaging, whereas those trailing in the polls are more likely to use negative tactics (Benoit 1997). The primary goal of political advertising is to shape public sentiment and persuade voters to support a particular candidate or party. Kaid (2012) underscores the vital role of political advertising within electoral communication, as media sources function as channels that shape, inform, and influence voter decision-making.

Research outlines the structured organization of political ads according to thematic elements: *Issue-centric advertisements* focus on significant political issues, such as healthcare, immigration, and climate change, demonstrating a candidate's understanding and proposed solutions to foster voter confidence (Holbrook and McClurg 2005).

Personality highlight ads emphasize a candidate's unique traits, such as integrity, leadership, accomplishments, and personal history, establishing a favorable perception among voters (Hayes 2013).

Comparative advertisements promote a candidate or party by highlighting contrasts in policies, personal traits, or historical records to persuade voters of the advertiser's superiority (Geer 2008).

Attack advertisements, or "negative ads," focus on undermining opponents by spotlighting past failures, controversies, or scandals, aiming to instill doubt about the opposition's competence (Fridkin and Kenney 2012; Kahn and Kenney 1999).

Fear-based advertisements leverage voter anxieties around national security or economic instability, presenting the candidate as the solution to these concerns to garner support (Brader 2006).

Inspirational advertisements use optimistic messaging, stirring emotions with powerful imagery and music to convey a vision that aligns with voters' aspirations (West 2017).

Biographical advertisements humanize candidates by sharing personal stories, challenges, and professional journeys, connecting candidates to voters and emphasizing their ties to local communities and public service commitment (Ridout and Franz 2011).

Chou's 2014 study found that ads endorsed by common citizens or entertainers, rather than political figures, can increase voter favorability and voting intent by building trust and credibility for the endorsed candidate. It's essential to note that these categories often overlap, with single ads incorporating elements from multiple types. The effectiveness of each type depends on

factors such as political context, target audience, and broader campaign strategies.

The literature review highlights the importance of distinguishing candidate advertisements to enable voters to make informed decisions. Scholars in political science and communication are deeply interested in the strategic communication techniques used by political actors, recognizing that these messages convey the party's core values, positions on key issues, and information targeted toward the electorate. Kaid (2012) underscores the transformative impact of the Internet on political advertising, while Benoit's functional theory contributes to our understanding of political language by emphasizing the importance of voter autonomy. Esser and Strömbäck (2012) examine the evolution of various campaign communication methods—including contemporary, postmodern, marketing-driven, and digital approaches—while considering each country's unique context. These variations create distinct challenges and opportunities, highlighting the diverse promotional strategies globally and how they diverge from ideal theoretical models. Norris (2023) expands on the concept of campaign eras, detailing a progression from premodern to modern and postmodern stages, ultimately leading to an era characterized by strategies centered on individuals, broadcasting, and internet platforms. This view aligns with prior theoretical perspectives.

Chadwick (2017, 2019) describes the current period as the "fourth era," defined by a media environment that integrates multiple elements. Kreiss (2016) and Kaid (2004) note that the rise of video-sharing platforms has profoundly influenced the political landscape, driving significant shifts in traditional campaign methods and strategies.

Methodology

The study employed a mixed-methods approach, combining qualitative and quantitative content analyses to examine political advertising content and strategy across national and general elections in Albania. This methodology was comprehensive, utilizing a variety of analytical tools to investigate the nuances of political advertising in electoral contexts. Content analysis, a well-established method in social research, involves the systematic, quantitative examination of communication messages for research purposes.

The study focused on the social media activities of active campaign candidates, particularly on Facebook and YouTube, in the 30 days leading up to the election. Research centered on Albania's primary political parties: the Socialist Party in the 2021 and 2023 elections, the Democratic Party in 2021, and the "Alliance Together We Win," which emerged from the Democratic Party in 2023. An extensive data collection strategy gathered a wide range of advertisements, forming a solid foundation for analyzing political communication techniques.

To ensure accurate and unbiased analysis, a rigorous sampling process was used to select advertisements. The sampling frame consisted of 84 unique advertisements identified for each candidate on the specified platforms (Facebook and YouTube) within the study period. This included both sponsored posts and display ads, representing the full scope of candidates' advertising activities. Given the relatively small overall sample size (84 advertisements), a subset of 53 ads—over 63% of the total—was chosen to ensure a comprehensive and dependable analysis.

A random number generator was used to select 53 advertisements per candidate from the pool of 84, arranging them chronologically for each candidate and selecting ads randomly. Numbers exceeding 84 were disregarded, and new ones were generated as needed. If an advertisement was found to be irrelevant or duplicated, a new selection was made using another

randomly generated number. This method ensured that each advertisement had an equal chance of selection, minimizing bias and enhancing the reliability of the sample.

To improve sample accuracy, additional steps were implemented, including organizing the initial sample frame by platform to achieve balanced representation across advertisement types. The sample was also validated to encompass a broad range of subjects and tones. Each selected advertisement underwent manual verification to confirm its relevance to the study, ensuring that duplicates, errors, and non-campaign-period ads were excluded.

The use of systematic random sampling, coupled with cross-verification, ensured that the sample encompassed a broad range of themes and tones, enhancing both the quality and comprehensiveness of the data. This meticulous sampling approach enabled the collection of a diverse and representative sample of the candidates' advertising activities, providing a solid foundation for analysis. The study's overall findings and conclusions were strengthened by the combination of systematic random sampling, stratification, and careful verification, which bolstered the reliability and validity of the data.

For the 2021 elections, data collection included advertisements from the public Facebook pages and official YouTube channels of Lulzim Basha, leader of the Democratic Party, and Edi Rama, leader of the Socialist Party. During the 2023 elections, the data also included content from Edi Rama and Erion Veliaj, the Socialist Party's candidate for Tirana, as well as ads from Sali Berisha, the informal leader of the Democratic Party, and Belind Kellici from the "Alliance Together We Win."

The study involved closely monitoring the official social media profiles and YouTube channels of the candidates and political parties to build a comprehensive dataset. This process entailed systematically collecting all advertisements placed on both platforms, focusing on content, structure, issues, and methods used. Regular visits to each page were conducted in the month leading up to election day to thoroughly document all campaign advertisements. Due to its labor-intensive and time-consuming nature, manual coding of the dataset was recognized as challenging. However, the comprehensive data collected provided a robust repository of political advertisements, reflecting the strategies deployed on the social media profiles of these political figures and enhancing understanding of political communication in Albania's election landscape. This study relies on Benoit's functional theory of campaign discourse. An in-depth comparative analysis of electoral advertising in Albania was conducted, yielding valuable insights into the strategies and communication tactics used by the primary political parties across election cycles (Suk et al. 2022). Ads were analyzed and categorized based on communication style—formal, informal, or mixed—and tone, such as positive, negative, neutral, or comparative. Recurring themes were identified and classified to provide insight into the thematic focus of political discourse. The advertisements were systematically grouped according to their features and approaches, examining types of appeals—logical, emotional, and credibility-based—as well as tactics like acclaim, attack, or defense. A detailed unit analysis of each ad was conducted, offering a thorough and cohesive evaluation of the campaign's content and strategy.

The analysis was divided into two main parts: first, transcribing all collected advertisements, and second, creating a codebook to evaluate the functions and strategies of advertising across various campaigns and parties. A detailed codebook was employed to systematically classify and analyze multiple aspects of each advertisement, such as overall characteristics, message appeals, and recurring themes. This codebook provided a structured and organized framework for thorough data analysis. Political advertisements were examined from multiple perspectives,

including policy, character, issues, and image, to achieve a comprehensive understanding. This empirical approach aimed to gain detailed insights into the evolution of election advertising techniques from 2021 to 2023 and their impact on political communication within these election cycles. Analyzing political advertising in Albania offered an in-depth view of the political communication landscape, revealing the evolving strategies and techniques used in political campaigns.

The coding process

The coding process in this study was carefully structured to ensure both reliability and accuracy. A coding frame, informed by the studies of Benoit (1997, 2001) and Scammell and Langer (2006), was employed to assess how political advertising influences voter engagement beyond merely disseminating information. The codebook was meticulously crafted to outline the essential guidelines for the coding procedure. Initially, all advertisements were manually transcribed, followed by the development of the codebook. The 'coding unit' specifies the section of the advertisement to be coded, which may include words, sentences, or paragraphs, while the 'context unit' comprises the entire advertisement, providing context for interpreting the coding unit.

The advertisements were independently classified by the authors according to a specified coding scheme. Before coding the entire dataset, a preliminary analysis of 10 advertisements was conducted to resolve any discrepancies and establish a unified understanding of the methodology. The Cohen's Kappa coefficients, used to measure intercoder reliability, indicated a strong level of agreement among the authors, with a minimum value of 0.82. Test-retest reliability was also employed to assess the codebook's consistency by having two coders analyze the same content at different times. This method ensures that the codebook provides precise and consistent instructions, which are essential for the accuracy of the research results, as highlighted by Graber (2004).

This study applies Benoit's (2014) functional theory of campaign discourse to systematically analyze political commercials. Benoit's theory suggests that political campaigns primarily use comparative messaging, where politicians frame their communications to appear more favorable than those of their opponents. The theory outlines three main strategies in political advertisements: acclaim, which showcases politicians' qualifications and positive attributes; attack, which criticizes opponents' weaknesses; and defense, where politicians respond to criticisms with counterarguments. These tactics are further divided into two narrative realms: policy, which emphasizes achievements, plans, and visions related to governance; and character traits, which highlight personal competencies, communication skills, leadership qualities, and adherence to ideals. This coding system provides a comprehensive framework for analyzing the complex dimensions of political communication in advertising.

Results and discussions

The first hypothesis posits that the Socialist Party (PS) and the Democratic Party (PD) prioritize different themes in their electoral advertisements across national and municipal elections. This hypothesis aims to determine whether patterns in thematic focus are consistent between the two major political parties or if each party employs distinct strategies in its campaigns. A dataset was compiled, coding the presence of 15 themes within 53 advertisements for both the PS and PD in both national (general) and local elections. Each advertisement was analyzed, marking themes such as economy, healthcare, and infrastructure as present (coded "1") or absent (coded "0"). To compare thematic focus,

contingency tables were constructed for each pairing (e.g., PS National vs. PD National, PS National vs. PD Local, etc.). In these tables, rows represented different themes, while columns captured the count of advertisements where those themes were present for each party and election type. A Chi-square test was then applied to each contingency table. To ensure the validity of these tests, the dataset met essential criteria: it contained no repeated measures or paired observations, thus maintaining the independence of each advertisement; expected frequencies met the minimum threshold of 5; and the sample size of 53 ensured representativeness and minimized selection bias, supporting the robustness of the Chi-square analysis.

The Chi-square test assesses whether there is a significant association between two categorical variables—political party (PS or PD) and election type (national or local)—in relation to the various advertisement themes. The degrees of freedom (df) for each test were calculated, and the Chi-square statistic was compared to the Chi-square distribution with the corresponding df to obtain the *p*-value. This *p*-value was then compared to the significance level (set at 0.05). A *p*-value below this threshold would indicate a significant association between the themes emphasized in advertisements and the type of election or political party, leading to rejection of the null hypothesis. The Chi-square test not only reveals the prevalence of themes in political advertisements but also sheds light on the strategic differences in campaign messaging across political parties and election types. The findings, presented in Table 1, detail the Chi-square statistic, *p*-value, and degrees of freedom for each comparison. With all *p*-values reported as less than 0.001, the null hypothesis was rejected in each case. These results indicate that the Socialist Party (PS) and the Democratic Party (PD)

exhibit distinct thematic focuses in their advertisements for national versus local elections, with these differences being statistically significant.

The first hypothesis was confirmed, revealing significant variations in theme emphasis not only between national and local elections within each party but also between the Socialist Party (PS) and the Democratic Party (PD) across both election types. Both the election type (national vs. local) and the political party influence the thematic focus of electoral advertisements, leading each party to prioritize different themes even within the same type of election.

The notable variations across all pairings suggest distinct strategic priorities for each party, reflecting diverse campaign tactics and ideological approaches. The significant Chi-square statistics for both national and local elections indicate that the PS and PD prioritize different topics in their electoral ads. The PS focuses on specific subjects during national elections, while the PD emphasizes different themes in municipal elections.

(Figure 1). The frequency of 15 dominant themes

Figure 1 illustrates the frequency of 15 dominant themes identified in electoral advertisements by the Socialist Party (PS) and the Democratic Party (PD) during national and municipal elections. It visually compares the emphasis each party places on issues such as economy, healthcare, and infrastructure, highlighting differences in campaign strategies by election type and political party.

In local elections, economic issues take priority, while areas such as healthcare and tourism receive less attention. Research on the dominant themes of municipal elections shows a significant focus on infrastructure (cited 39 times), with issues like immigration largely neglected. National elections, however, reveal shifts in the main themes emphasized by each party. The Socialist Party (PS) prioritizes healthcare as a central issue, strongly emphasizing improvements in health services, while topics such as crime, justice, and technology are absent from its campaign. Conversely, the Democratic Party (PD) focuses on social issues in national elections, mentioning them 31 times, yet overlooks other important categories.

This difference in focus underscores the contrasting agendas of the PS and PD depending on the election type. In municipal elections, the PS emphasizes economic issues, shifting to healthcare in national elections. Meanwhile, the PD prioritizes infrastructure in local elections, pivoting to social issues in national

Table 1 Chi-square Test Results for hypotheses H1.		
H1	PS National	PD Local
PD National	Chi-square = 106.17 p-value < 0.001 df = 14	Chi-square = 108.88 p-value < 0.001 df = 14
PS Local	Chi-square = 82.39 p-value < 0.001 df = 14	Chi-square = 48.5 p-value < 0.001 df = 14

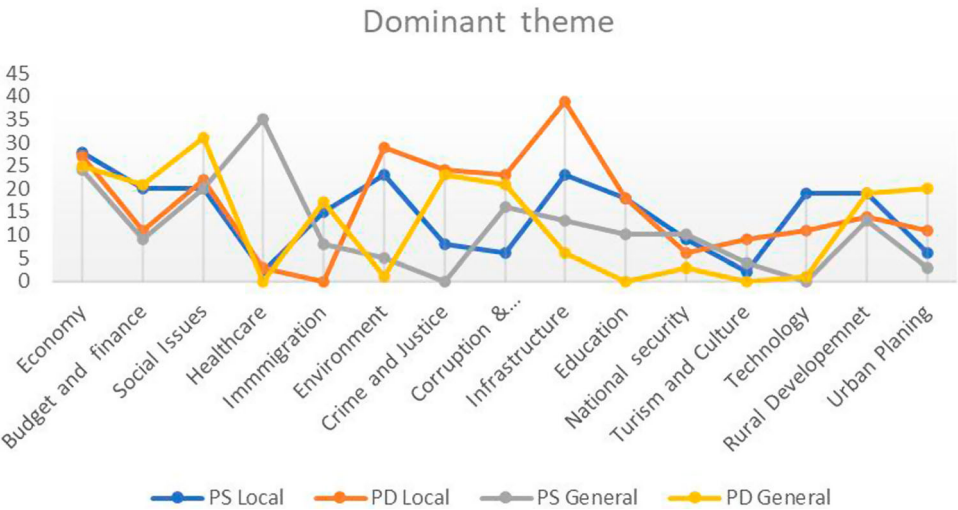


Fig. 1 Thematic focus across election types and parties. This figure illustrates the frequency of 15 dominant themes identified in electoral advertisements by the Socialist Party (PS) and the Democratic Party (PD) during national and municipal elections. It visually compares the emphasis each party places on issues such as the economy, healthcare, and infrastructure, highlighting differences in campaign strategies across election types and political parties.

Table 2 Chi-square Test Results for hypotheses H2.		
H2	PS National	PD Local
PD National	Chi-square = 9.34 p-value = 0.0093 df = 2	Chi-square = 1.06 p-value = 0.58 df = 2
PS Local	Chi-square = 1.91 p-value = 0.38 df = 2	Chi-square = 2.74 p-value = 0.25 df = 2

Table 3 Chi-square Test Results for hypotheses H3.		
H3	PS National	PD Local
PD National	Chi-square = 14.39 p-value < 0.001 df = 2	Chi-square = 1.51 p-value = 0.46 df = 2
PS Local	Chi-square = 1.93 p-value = 0.38 df = 2	Chi-square = 12.39 p-value = 0.002 df = 2

Table 4 Chi-square Test Results for hypotheses H4.		
H4	PS National	PD Local
PD National	Chi-square = 20.98 p-value < 0.001 df = 3	Chi-square = 24.78 p-value < 0.001 df = 3
PS Local	Chi-square = 12.23 p-value = 0.006 df = 3	Chi-square = 5.61 p-value = 0.13 df = 3

Table 5 Chi-square Test Results for hypotheses H5.		
H5	PS National	PD Local
PD National	Chi-square = 20.98 p-value < 0.001 df = 2	Chi-square = 7.13 p-value < 0.028 df = 2
PS Local	Chi-square = 10.006 p-value = 0.006 df = 2	Chi-square = 5.61 p-value = 0.13 df = 2

campaigns. The PD’s national strategy centers on issues critical to its constituency while de-emphasizing areas such as healthcare, education, tourism, culture, and technology.

These findings highlight the specific themes shaping the campaign strategies of Albania’s two main parties, underscoring their adaptive approaches and voter engagement efforts in response to the electoral landscape. This nuanced thematic approach not only reflects the parties’ strategic flexibility but also underscores their intent to align with voter concerns and priorities across varying election contexts.

The second hypothesis posits that the use of formal, informal, and mixed communication styles in electoral advertisements varies significantly between the Socialist Party (PS) and the Democratic Party (PD) and across different election types.

The Chi-square statistic for PS Local vs. PD Local is not significant ($p > 0.05$), indicating no significant difference in the use of communication styles between the two parties during local elections. The higher p -value suggests that any observed differences in communication style could reasonably occur by chance Tables 2–5.

The frequency counts for communication styles (formal, informal, mixed) in local and national elections for both PS and PD are as follows: in local elections, both parties predominantly used a formal communication style, with 37 instances by PS and 45 by PD. This is followed by the informal style, used 14 times by PS and 8 times by PD, and the mixed style, which is the least common, used 2 times by PS and 1 time by PD.

In national elections, the formal style remains the most common, with 39 instances by PS and 44 by PD. However, PS exhibits a higher frequency of informal style usage (20 instances) compared to PD (9 instances), while the mixed style appears infrequently for PS (6 instances) and is not used at all by PD (0 instances).

(Figure 2). Comparison between different communication style

Figure 2 compares the use of formal, informal, and mixed communication styles in the electoral advertisements of the Socialist Party (PS) and the Democratic Party (PD) during both national and local elections. It illustrates how each party adjusts its communication approach to engage different audiences, reflecting strategic preferences at the national versus local levels. According to Fig. 2, the significant results in national elections suggest that PS and PD employ distinct communication strategies, with PS potentially blending formal and informal styles more than PD, which tends to rely on a primarily formal style. The absence of significant differences in local elections implies that both parties adopt similar communication styles for local campaigns, favoring a formal style over informal or mixed approaches.

Hypothesis 3 proposes that there is a notable disparity in the emphasis placed on candidates’ image versus policy or thematic content when comparing national and local elections. Specifically, national elections are expected to emphasize the candidate’s “image,” while local elections focus more on “issues.”

The data supports this hypothesis, showing that national elections prioritize the candidate’s image more than local elections, which concentrate on policy matters. This distinction aligns with Hypothesis 3, indicating a significant difference in the focus on candidates’ image versus policy content between national and municipal elections.

The Chi-square tests revealed significant differences between PS National vs. PD National and PS Local vs. PS National, supporting the hypothesis that, while policy discussions are present at both election levels, national elections tend to place a greater emphasis on the candidate’s image.

(Figure 3). Frequency of distribution image vs issues

This figure illustrates the shift in electoral advertisement focus from policy matters in municipal elections to candidate image in national elections, highlighting the strategic choices made by PS and PD to align their campaign messages with the electoral context.

Hypothesis 4 posits that the two parties display different advertisement tones, with the Socialist Party more frequently using a “positive-acclaim” tone, while the Democratic Party more often employs “negative-attack” and “comparative” tones in their advertisements.

A p -value below 0.001 and a Chi-square value of 20.98 indicate a significant difference in advertisement tone between PD National and PS National, revealing notable distinctions in the advertising strategies of the two parties at the national level, in alignment with the theory. Similarly, a Chi-square value of 24.78 with a p -value < 0.001 at the local level indicates a significant difference in advertisement tones between PD Local and PS Local, further supporting the hypothesis. A Chi-square value of 12.23 with a p -value of 0.006 shows a statistically significant difference, albeit less pronounced, between the tones in PS local election ads and PD national election ads.

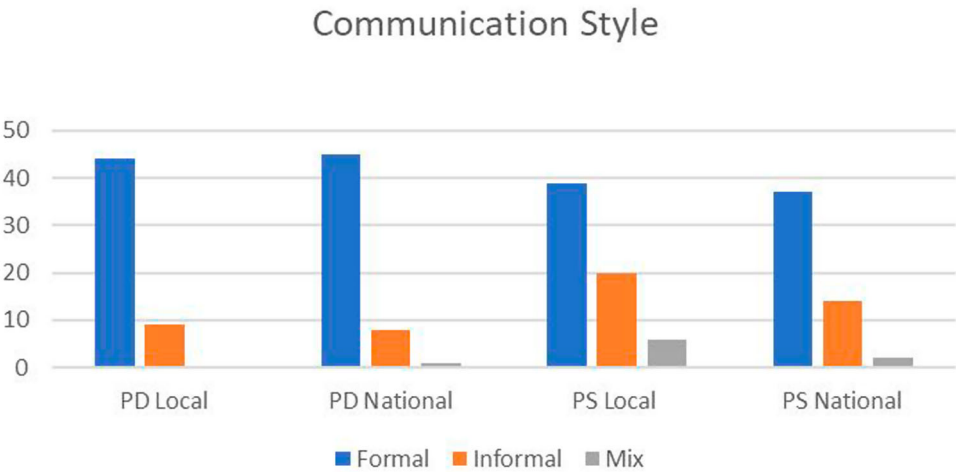


Fig. 2 Communication styles in election advertisements. This figure compares the usage of formal, informal, and mixed communication styles in the electoral advertisements of PS and PD across national and local elections. It demonstrates how each party adapts its communication approach to engage different audiences, reflecting varying strategic preferences at the national versus local level.

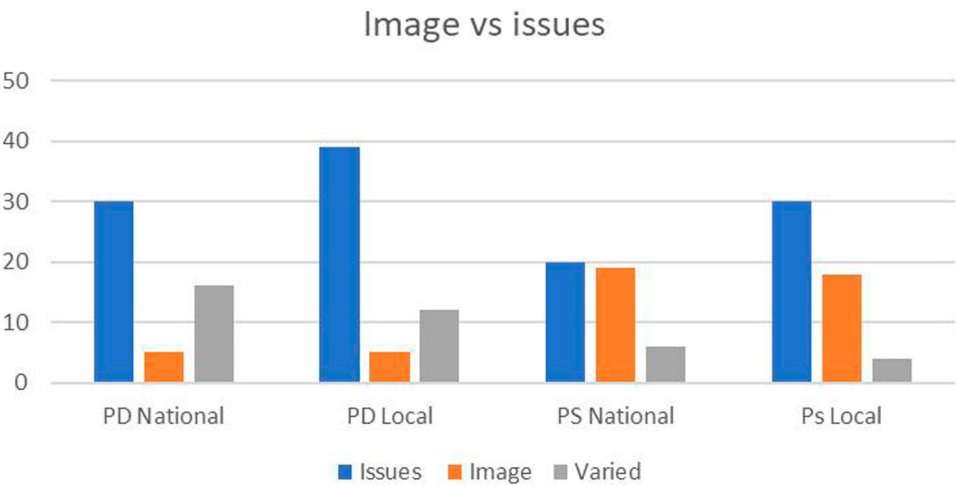


Fig. 3 Candidate image vs. policy issues emphasis. This figure illustrates how the focus of electoral advertisements shifts from policy matters in municipal elections to the candidate’s image in national elections. It underscores the strategic choices made by PS and PD in aligning their campaign messages with the electoral context.

The Chi-square statistic shows no significant difference in advertisement tones between PS and PD in the local election context, with a *p*-value greater than 0.05. These results provide substantial evidence for Hypothesis 4, indicating that the Socialist Party (PS) used positive-acclaim tones more frequently than the Democratic Party (PD), especially in national elections where PD more often employed negative and comparative tones. However, this distinction is less evident in local elections, as data indicates no significant difference in tone between the two major parties.

The visual representation in Fig. 4 highlights these differing strategic approaches in election advertising, suggesting potential variations in campaign ideology and targeting strategies.

(Figure 4). Frequency distribution of advertisements tone

Hypothesis 5 posits that the Socialist Party (PS) and the Democratic Party (PD) employ different thematic appeals, with the Socialist Party using “emotional appeals” more frequently and the Democratic Party favoring “logical appeals.” An analysis of their advertising tactics confirms this hypothesis, showing variations in theme appeals between the two parties. The Democratic Party primarily relies on emotional appeals, particularly at the national level, as reflected in the frequency of such appeals in

their advertisements (PD National: 37, PD Local: 30). Conversely, the Socialist Party leans toward logical appeals in both national and local elections (PS National: 16, PS Local: 28). Additionally, the Socialist Party employs a diverse thematic approach, with a significant focus on credibility appeals at both the national and local levels (PS National: 20, PS Local: 20). Substantial Chi-square test results reveal distinct and contrasting advertising strategies between the two parties across different election stages.

The analysis of the Democratic Party (PD) and Socialist Party (PS) advertising strategies supports the revised hypothesis that thematic appeals differ between the two parties. The Democratic Party primarily uses emotional appeals, especially at the national level, as indicated by the higher frequency of such appeals in their advertisements (PD National: 37, PD Local: 30). In contrast, the Socialist Party favors logical appeals in both national and local elections (PS National: 16, PS Local: 28). Additionally, the Socialist Party places substantial emphasis on credibility appeals (PS National: 20, PS Local: 20), highlighting a strategic use of thematic diversity in its campaigns. Significant Chi-square test results confirm distinct and contrasting advertising approaches between the two parties across election levels.

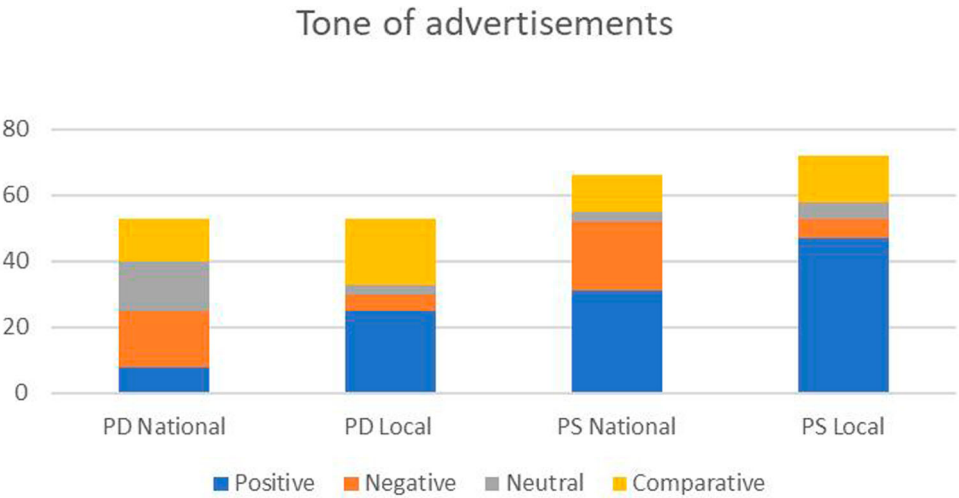


Fig. 4 Advertisement tone distribution. This figure displays the distribution of advertisement tones—positive, negative, neutral, and comparative—utilized by PS and PD in national and municipal elections. It provides insight into the strategic use of emotional appeals and highlights distinctions between the parties’ approaches to engage voters and frame the electoral narrative.

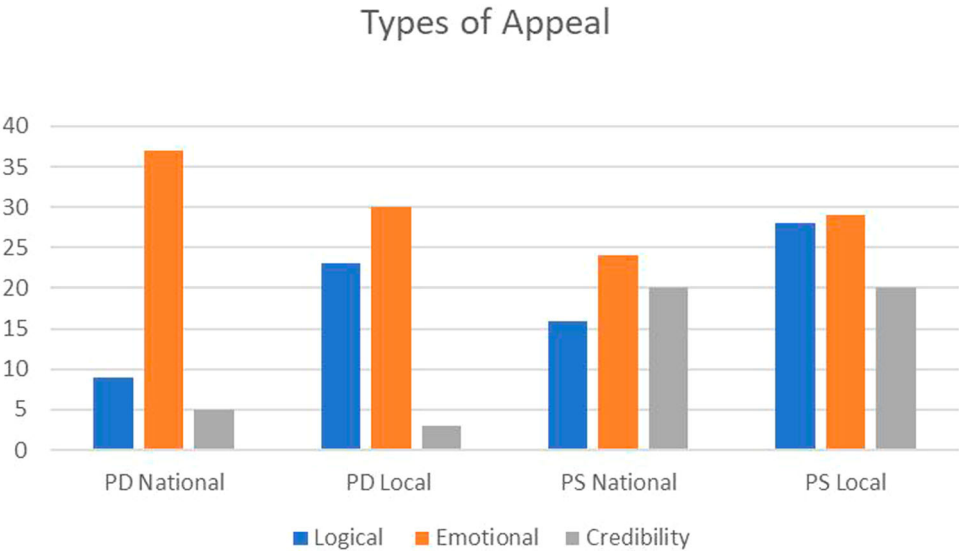


Fig. 5 Types of appeal in electoral advertisements. This figure illustrates the types of thematic appeals—logical, emotional, and credibility—employed in PS and PD advertisements, comparing their use across different election types. It highlights the strategic emphasis on various appeals to resonate with the electorate’s concerns and values, differentiating between emotional engagement and logical persuasion strategies.

(Figure 5). Distributions and comparison of types of appeals. Figure 5 illustrates the types of thematic appeals—logical, emotional, and credibility—used in the advertisements of PS and PD and contrasts their application across national and local elections. It highlights each party’s strategic emphasis on different appeals to resonate with the electorate’s concerns and values, showcasing the contrast between emotional engagement and logical persuasion strategies.

Study implications

This study has significant implications for political parties, advertisers, and politicians. The findings shed light on the tactics and differences in theme emphasis, communication strategies, focus on candidate image versus policy content, advertisement tones, and thematic appeals used by Albania’s two main political parties. These insights can help political parties refine their campaign strategies to better align with voter concerns and

preferences across different electoral contexts. Additionally, advertisers may use these findings to design more effective political advertisements that meet strategic objectives and resonate with target audiences. Lawmakers can also benefit by gaining a deeper understanding of the evolving dynamics of political communication, its impact on voter engagement, and its role in democratic processes.

Challenge, limitations and recommendation

Despite its strengths, this study has certain limitations that warrant acknowledgment. The focus on Albania’s specific political context may limit the applicability of the findings to other countries with different political and cultural environments. Political advertising strategies and voter behavior can vary significantly across countries and political systems, which may constrain the generalizability of our results. Additionally, relying on publicly accessible internet video advertisements might not

capture the full spectrum of campaign tactics, particularly those employed in less visible or offline settings. Although the study's mixed-methods approach provides a comprehensive analysis, the human coding process introduces an element of subjectivity, which could result in bias. To mitigate this, a detailed codebook based on established frameworks was developed to reduce subjectivity in coding.

The Chi-square test, used in this study, also requires a sufficiently large sample size for validity and assumes homogeneity of variances across categories—conditions that may not always hold. Moreover, the continuous evolution of digital platforms and rapid advancements in political communication mean that these findings may become outdated as new technologies and approaches emerge. Future research could build on this work by examining a broader range of political contexts, incorporating more diverse data sources, and developing more objective coding methods. Recognizing these limitations is essential for advancing research in political communication.

Conclusion

This study examines the complex electoral advertising strategies employed by Albania's two main political parties, the Socialist Party (PS) and the Democratic Party (PD), in both national and local elections. Utilizing Benoit's functional theory of political campaign discourse, the study meticulously analyzed 212 online video advertisements to identify the specific objectives and content shaping the political landscape of the 2021 national and 2023 local campaigns. The results reveal distinct strategic differences in topic emphasis, not only across election types within each party but also between the two parties themselves. These distinctions align with research on the impact of advertising in shaping voter perceptions (Brownstein 2008; Jackson et al. 2000). Both PS and PD crafted unique narratives for national elections, differing from their local campaigns, confirming the first hypothesis. In both election types, PS consistently prioritized economic issues, reinforcing its economic agenda, while PD shifted focus from infrastructure in local elections to social issues in national elections, demonstrating a nuanced approach to addressing voter concerns at different levels. Applying Benoit's functional theory, our analysis confirms that campaign discourse addresses both policy and character, with candidates crafting messages to acclaim, attack, or defend (Benoit 1997, 2003). PS's emphasis on economic issues and PD's focus on infrastructure and social issues validate the interconnected nature of policy and character as highlighted by Hacker et al. (2000) and Strömbäck (2007). Additionally, the study supports Hypothesis 2, which posits significant differences in communication styles between the parties in national elections: PS used both formal and informal styles, while PD primarily adhered to a formal approach. These findings align with previous research on strategic choices in political messaging (Gunsch et al. 2000; Kaid 2002). The discrepancy in communication style was less pronounced in local elections, where both parties favored a more formal approach.

The study also validates Hypothesis 3, confirming that national elections placed greater emphasis on candidates' images, while local campaigns focused more on policy and issues. This shift reflects a strategic imperative to engage national voters' opinions and emotions, contrasting with the narrower focus of local elections. Hypothesis 4 was supported, revealing a distinct division in advertisement tones: PS favored "positive-acclaim" tones, promoting a positive campaign image, whereas PD used "negative" and "comparative" tones to create sharp contrasts with their opponents. These findings on advertisement tones resonate with Benoit's (1997) analysis of presidential advertising trends, as well as the strategic use of positive and negative messaging noted by Fridkin and Kenney (2012) and Kahn and Kenney (1999).

Finally, the validation of Hypothesis 5 provides insight into the thematic appeals favored by the parties. PS primarily employed logical appeals, aligning with its strategy of emphasizing rational discourse, while PD utilized emotional appeals to forge a personal connection with voters, especially in national campaigns.

The thematic appeals preferred by the parties—PS's use of logical appeals and PD's reliance on emotional appeals—reflect a dual approach in political advertising that highlights each party's strengths and contrasts them with their opponents (Holbrook and McClurg 2005; Hayes 2013; Geer 2008). These findings offer insights into the strategic adjustments and interactions between political entities and voters within Albania's distinct electoral landscape. Significant differences in thematic emphasis, communication styles, focus on candidate image versus policy, advertisement tones, and thematic appeals contribute to a complex and strategic political communication environment.

Both parties carefully design these techniques to align with their campaign objectives, reflecting their beliefs and their understanding of voter preferences. Their strategic use of varied appeals and themes underscores efforts to create narratives that resonate with voters across different types of elections. This research elucidates how PS and PD navigate the intricacies of electoral communication, employing unique strategies that vary by election type—national or local. The findings underscore the importance of content and communication in shaping public opinion and suggest that political parties in Albania are acutely aware of the impact of strategic communication on voter behavior. Overall, this study provides valuable insights into political communication in Albania, establishing a solid foundation for future research into election strategies within developing democracies.

Data availability

The datasets generated and analyzed during the current study are available in <https://doi.org/10.5281/zenodo.12674885> open repository.

Received: 16 March 2024; Accepted: 7 November 2024;

Published online: 16 November 2024

References

- Abazi E (2013) Media and democracy in Albania. *Eur J Commun* 28:1–19
- Atkinson JM (1984) Our masters' voices: The language and body language of politics. Psychology Press
- Ballotti J, Kaid LL (2000) Examining verbal style in presidential campaign spots. *Commun Stud* 51:258–273
- Benoit WL (1997) A functional approach to televised political spots: Acclaiming, attacking, defending. *Commun Q* 45:1–20
- Benoit WL (2001) The functional approach to presidential television spots: Acclaiming, attacking, defending 1952–2000. *Commun Stud* 52:109–126. <https://doi.org/10.1080/10510970109388546>
- Benoit WL (2003) Topic of presidential campaign discourse and election outcome. *West J Commun* 67:97–112
- Benoit WL (2014) A functional analysis of political television advertisements. Lexington Books
- Benoit WL, Compton JL (2014) A functional analysis of 2012 presidential primary TV spots. *Am Behav Sci* 58:497–509. <https://doi.org/10.1177/0002764213506209>
- Biberaj E (2023) Albania's foreign policy in the twenty-first century. In: Gardner H (ed) *Geopolitical turmoil in the Balkans and Eastern Mediterranean*. Palgrave Macmillan
- Brader T (2006) Campaigning for hearts and minds: How emotional appeals in political ads work. Univ Chicago Press. <https://doi.org/10.7208/chicago/9780226788302.001.0001>
- Brownstein R (2008) The first 21st-century campaign. *Natl J* 40:26–32
- Çani S (2017) Social media influence in Albanian elections. *Mediterr J Soc Sci* 8:210–221

- Chadwick A (2017) *The hybrid media system: Politics and power* (2nd ed.). Oxford Univ Press
- Chadwick A (2019) The new crisis of public communication: Challenges and opportunities for future research on digital media and politics. Loughborough Univ. <https://hdl.handle.net/2134/11378748.v1>
- Chou HY (2014) Effects of endorser types in political endorsement advertising. *Int J Advert* 33:391–414
- Esser F, Strömbäck J (2012) Comparing news on national elections. In: Esser F, Hanitzsch T (eds) *Handbook of comparative communication research*. Routledge, London
- Fowler EF, Franz MM, Martin GJ, Peskowitz Z, Ridout TN (2021) Political advertising online and offline. *Am Polit Sci Rev* 115:130–149
- Fridkin KL, Kenney PJ (2012) The role of candidate traits in campaigns. *J Polit* 74:61–73
- Geer JG (2008) *In defense of negativity: Attack ads in presidential campaigns*. Univ Chicago Press
- Goldstein K, Freedman P (2002) Campaign advertising and voter turnout: New evidence for a stimulation effect. *J Polit* 64:721–740. <http://www.jstor.org/stable/1520110>
- Graber DA (2004) Methodological developments in political communication research. In: *Handbook of political communication research*, pp 63–86. Routledge
- Gunsch MA, Brownlow S, Haynes SE, Mabe Z (2000) Differential forms of linguistic content in political advertising. *J Broadcast Electron Media* 44:27–42
- Hacker KL, Zakahi WR, Giles MJ, McQuitty S (2000) Components of candidate images: Statistical analysis of the issue-persona dichotomy in the presidential campaign of 1996. *Commun Monogr* 67:227–238
- Hayes D (2013) Candidates, issues, horse races, and hoopla: Presidential campaign coverage, 1888–2008. *Am Polit Res* 41:417–446
- Holbrook TM, McClurg SD (2005) The mobilization of core supporters: Campaigns, turnout, and electoral composition in United States presidential elections. *Am J Polit Sci* 49:689–703
- Jackson RJ, Jackson D, Lepore GM (2000) The mobilization of voters in Canada: A systemic study. *Int Polit Sci Rev* 21:411–430
- Jamieson KH (1988) *Eloquence in an electronic age: The transformation of political speechmaking*. Oxford Univ Press
- Jusufović I (2021) Albania's transformation since 1997: Successes and failures. *Croat Int Relat Rev*
- Kaid LL (2002) Political advertising and information seeking: Comparing exposure via traditional and Internet channels. *J Advert* 31:27–35. <http://www.jstor.org/stable/4189205>
- Kaid LL, Johnston A (1991) Negative versus positive television advertising in U.S. presidential campaigns, 1960–1988. *J Commun* 41:72–87
- Kaid LL, Postelnicu M (2005) Political advertising in the 2004 election: Comparison of traditional television and Internet messages. *Am Behav Sci* 49:265–278
- Kaid LL (ed) (2004) *Handbook of political communication research*. Routledge
- Kaid LL (2012) Political advertising as political marketing: A retro-forward perspective. *J Polit Mark* 11:29–53. <https://doi.org/10.1080/15377857.2012.642731>
- Kalemaj I (2005) Media in post-communist Albania. *Southeast Eur Black Sea Stud* 5:233–252
- Kahn KF, Kenney PJ (1999) Do negative campaigns mobilize or suppress turnout? Clarifying the relationship between negativity and participation. *Am Polit Sci Rev* 93:877–889
- Kreiss D (2016) *Prototype politics: Technology-intensive campaigning and the data of democracy*. Oxford Univ Press
- Lilleker D, Jackson N (2013) Political campaigning, elections and the Internet: Comparing the US, UK, France and Germany. Routledge
- Londo I (2008) Media ownership and its impact on media independence and pluralism in Albania. Albanian Media Institute
- Misha P (2002) Albania's democratic transition: Institutions and processes. *J Southeast Eur Stud* 7:45–58
- Norris P (2023) A virtuous circle: Political communications in postindustrial societies. In: *The political communication reader*, pp 111–116. Routledge
- Ridout TN, Franz MM (2011) The persuasive power of campaign advertising. Temple Univ Press
- Scammell M, Langer AI (2006) Political advertising: Why is it so boring? *Media Cult Soc* 28:763–784. <https://doi.org/10.1177/0163443706067025>
- Sikanku GE (2022) Presidential discourse, the public, and recurring themes: A political communication analysis of the 2019 State of the Nation Address in Ghana. *Commun Public* 7:176–187. <https://doi.org/10.1177/20570473221129652>
- Sides J, Karch A (2008) Messages that mobilize? Issue publics and the content of campaign advertising. *J Polit* 70:466–476. <https://doi.org/10.1017/S0022381608080432>
- Strömbäck J (2007) Political marketing and professionalized campaigning. *J Polit Mark* 6:49–67. https://doi.org/10.1300/J199v06n02_04
- Suk J, Coppini D, Muñoz C, Rojas H (2022) The more you know, the less you like: A comparative study of how news and political conversation shape political knowledge and affective polarization. *Commun Public* 7:40–56. <https://doi.org/10.1177/20570473211063237>
- Vickers M, Pettifer J (1997) *Albania: From anarchy to a Balkan identity*. Hurst & Company
- West DM (2017) *Air wars: Television advertising and social media in election campaigns, 1952–2016*. CQ Press

Author contributions

These authors contributed equally to this work, sharing first authorship. All authors made significant contributions to the article and approved the submitted version.

Competing interests

The authors declare no competing interests.

Ethical approval

This study involved content analysis of publicly accessible internet video advertisements from the Socialist Party (PS) and the Democratic Party (PD) related to Albania's 2021 national elections and 2023 municipal elections. Given the absence of human participants and reliance on publicly aired materials intended for widespread dissemination, ethics approval was deemed unnecessary. The advertisements analyzed were designed to inform and influence the electorate and are considered public-domain information, thus raising no confidentiality or privacy concerns typically associated with research involving human subjects. To ensure ethical compliance, the study adhered to all relevant legal and ethical standards, including fair use guidelines, copyright laws, and data protection regulations. The analysis was conducted with transparency and integrity, accurately reflecting the content and objectives of the advertisements without misrepresentation. A comprehensive and unbiased sample of advertisements was used to mitigate the possibility of skewed outcomes. Ads from various time periods and across two platforms were included, providing a well-rounded perspective on advertising strategies. Interpretation bias was minimized through objective, standardized coding schemes based on established frameworks. These coding schemes were rigorously tested, achieving high intercoder reliability through thorough training and consistent application. The findings are reported transparently, regardless of their alignment with initial hypotheses, to prevent selective reporting and promote openness in the research process.

Informed consent

This article does not contain any studies with human participants performed by any of the authors.

Additional information

Correspondence and requests for materials should be addressed to Lorena Licenji or Julian Hoxha.

Reprints and permission information is available at <http://www.nature.com/reprints>

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Open Access This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

© The Author(s) 2024