

The Reinforcing Spirals of Beliefs: How New Media Landscapes Shape Polarization Trends in Croatia

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Abstract: This paper examines the relationship between media consumption and political polarization in Croatia, with a specific focus on the differential effects of traditional and Internet-based media. Drawing on cultivation theory and the reinforcing spirals model, the paper examines how media use contributes to political polarization. The paper utilizes survey data from an online opt-in sample of the Croatian population ($N = 1,021$), to test hypotheses related to media consumption patterns and their connection with political identification. The findings suggest that consuming Internet news tends to increase political polarization. In contrast, television news consumption is associated with more centrist political identification. The study also discusses the broader implications of these findings, highlighting the role of digital media in shaping political identities. By integrating theoretical frameworks with empirical analysis, this paper strives to present valuable insights into the complex interplay between media consumption and political polarization in the digital age.

Keywords: Political polarization; Cultivation theory; Reinforcing spirals model; Media environment; Croatia.

INTRODUCTION

The primary aim of this paper is to empirically investigate the relationship between media consumption and political polarization, with a specific focus on comparing the effects of traditional television media and Internet-based media in Croatia. The study aims to determine whether the consumption of these media types contributes to political mainstreaming or polarization among the public. Over the last decades, Croatia has experienced an increase in political and value polarization, characterized by a noticeable alignment of political orientation and ideological attitudes, as well as a stronger connection between political identification and other significant forms of social identity, such as religiosity (Pavić, 2024). While much of the literature focuses on the US, this paper aims to discuss the specific trends in political polarization in Croatia and the media underpinnings within the broader context of global developments. The rationale for this study is particularly pronounced in the context of increasing political polarization observed in many democracies worldwide, as it seeks to contribute to understanding political polarization in the digital age.

MEDIA CULTIVATION

During the 1970s and 1980s, a research program started by George Gerbner and his associates aimed at discovering media effects, especially the “cultivation differentials”, i.e. differences between heavy and light television users in their adoption of the “television world” (Gerbner et al., 1986). Their basic contention was that the television world significantly diverges from the real world, and that exposure to television programming creates a blueprint for interpreting reality. Through the process called “mainstreaming”, the political differences that arise from social, cultural, and demographic processes tend to shrink among more active media users. Namely, the mainstreaming implies that these differences should be smaller or even nonexistent between the sub-groups of heavy users (Gerbner et al., 1986). For instance, Gerbner et al. (1986) found that heavy television users from all political affiliations are more likely to identify themselves as moderates compared to light users, who are more likely to apply liberal or conservative labels. In this context, mainstreaming would result from television programming that attempts to maintain the middle-of-the-road position to attract mass audiences. Gerbner et al. (1982) also confirmed the political mainstreaming of television viewing by showing that heavy television viewing blurs class distinctions based on socioeconomic status (SES), making lower-SES groups more likely to label themselves as middle-class, while at the same time making higher-SES groups more likely to label themselves as working-class.

Recent contributions in cultivation theory often investigated the cultivation effects of specific media genres rather than the overall cultivation effect (for an overview, see Morgan and Shanahan, 2010). The rationale behind such a decision relates to the vast differences between various media genres and their content, which may lead to a nonexistent overall cultivation effect.

Moreover, in the initial phases of the research program development, the cultivation approach primarily focused on television, whereas recent decades have witnessed significant changes in the media environment. For instance, Roche, Pickett, and Gertz (2016) noted that users consume Internet news differently than they do in the case of traditional media. Namely, internet news content comes from increasingly varied perspectives and is more freely selected and shared. Partisan information sources are gaining traction on the Internet, thereby offering partisan news not only to politically active individuals but also to apolitical ones (Lelkes et al., 2017). Pariser (2011) claimed that web personalization leads to unintended consequences, such as the creation of “filter bubbles” that reinforce existing attitudes and worldviews. Barbera et al. (2015) found that information exchange on Twitter about political issues (via retweets) is primarily related to communication among individuals with similar ideological preferences.

Overall, the nature of media landscapes has undergone a dramatic shift, characterized by evolving from traditional mass media to contemporary social media. This shift has introduced new dynamics in how information is disseminated and consumed, leading to a more fragmented yet personalized media experience—one that can both challenge and reinforce established belief systems. As audiences increasingly curate their media environments, the potential for echo chambers and filter bubbles grows, further complicating the relationship between media exposure and belief formation (Pariser, 2011; Montag & Hegelich, 2020; Sunstein, 2017). The question “What’s your reality?” is becoming increasingly prominent and relevant in contemporary societies (Lindemann, 2020).

However, the growing influence of the Internet and active media consumers also drives media convergence, understood as the flow of content across delivery channels that blur the distinction between old and new media (Jenkins, 2006). Moreover, the fragmentation of old media provides users with the opportunity to select content that aligns more closely with their existing political and social attitudes, and the gate-keeping role of journalists is changing as well (Michailidou & Trenz, 2021). Therefore, it is not surprising that some studies (Fletcher & Nielsen, 2017; Steppat et al., 2022) did not find significant differences in levels of selective exposure between traditional (old) and online (new) media users. These recent trends imply the need for reanalysis and reevaluation of the cultivation effects of old and new media.

A slightly different approach from cultivation theory, the reinforcing spirals model (RSM), proposed by Michael D. Slater (2007), hypothesizes a cyclical

relationship in which media use influences political ideology over time, leading to increased polarization. While George Gerbner's cultivation theory posited that long-term exposures to media content shape perceptions and beliefs about reality, often resulting in more homogenized values and worldviews, contemporary approaches recognize a more complex and dynamic relationship between media and audiences (Morgan & Shanahan, 2010). While RSM emphasizes active engagement with media that aligns with existing beliefs, cultivation theory focuses on the gradual shaping of attitudes through consistent media narratives, highlighting different mechanisms of influence.

These theoretical frameworks underscore that individuals are not merely passive consumers but active participants in a dynamic interplay between their beliefs and the media landscape. RSM appears to contradict cultivation theory by suggesting that individuals are not simply shaped by media exposure over time but actively engage with content that reflects their preexisting beliefs and values. This creates a more complex interaction between personal agencies and media influence.

Recognizing the evolving media landscape, Cöster and Shehata (2024) proposed the idea of self-cultivation, emphasizing an active user role in selecting and interpreting content that aligns with their perspectives. This idea offers a more nuanced understanding of how digital media shapes values and attitudes. Andersen et al. (2023), drawing on uses and gratifications theory, explore how individuals actively seek media that fulfill specific needs, such as information acquisition, social interaction, or emotional support. This perspective highlights the dynamic interplay between user motivations and media consumption, suggesting that individuals are not merely passive recipients of information but actively shape their own media experiences. Essentially, Cöster and Shehata (2024) propose that modern media create seemingly parallel mainstreams, diverging from the classic cultivation theory notion of a single, homogenizing mainstream. Instead, self-cultivation leads to the consolidation of different mainstreaming frames, ultimately reinforcing contrasting beliefs rather than bringing them closer together.

This perspective aligns with recent research on the impact of social media on perceptions and beliefs. Studies have shown that high social media usage correlates with the development of more negative worldviews, exemplifying the Mean World Syndrome in digital contexts (Tsay-Vogel et al., 2018). Furthermore, the personalization of content in new media environments has intensified media dependency, making media content more relevant and potentially more influential (Ball-Rokeach & DeFleur, 1976; Stroud, 2010; Törnberg & Uitermark, 2021). The concept of self-cultivation also builds upon earlier work on selective exposure and confirmation bias in media consumption (Knobloch-Westerwick, 2015). As digital platforms offer content customization, users have become more selective in their media choices, leading to the creation of personal information

ecosystems (Bakshy et al., 2015; Stier et al., 2025). The transition from cultivation theory to self-cultivation reflects the need for more dynamic models to understand media effects in the digital age. As media environments continue to evolve, so too must our theoretical frameworks for understanding their societal impacts. The interplay between media selectivity, personal agency, and the reinforcing nature of digital media consumption presents both challenges and opportunities for future research in media effects and political communication (Valkenburg & Peter, 2013). Given the recent evolution from traditional mass media to digital and social media, it is reasonable to assume that the relationship between media consumption and political polarization has also changed.

PATTERNS OF POLITICAL POLARIZATION AND THEIR RELATIONSHIP WITH THE MEDIA LANDSCAPE

DiMaggio et al. (1996) identified four dimensions of opinion polarization that threaten social and political stability: dispersity, bimodality, constraint, and consolidation. Polarization increases as opinions diversify, become more extreme, correlate within domains, and align with individual identities. DiMaggio et al. (1996) also stated that they had not found evidence of an increase in those measures, indicating no evidence of political polarization at that time.

However, recent scholarship has revealed that political polarization, especially in developed democracies, has deepened as the media landscape has evolved. The proliferation of broadband Internet and the subsequent rise of digital and social media have contributed significantly to this trend. For example, Iyengar et al. (2012) found that, in recent decades in the USA, affective political polarization has increased, as measured by emotions toward members of opposing political parties, concerns about inter-party marriage, and stereotypes of party supporters. The authors attribute this rise in polarization not to growing ideological differences, which have remained relatively stable, but to increased exposure to negative political campaigning. This suggests that the nature of political discourse and the media environment may play a more critical role in driving affective polarization than shifts in political beliefs or policy positions. Prior (2013) concluded that partisanship in the USA increased only to the extent that ideological polarization between the main parties increased.

The increase in ideological polarization among citizens is primarily linked to the polarization of politically engaged citizens. Thus, linking ideological polarization and political engagement, Prior (2013) also notes that the most plausible explanation for the link between the increase in political polarization and the growth of cable television and the Internet is that less politically engaged citizens have increasingly chosen entertainment over political news.

Consequently, elections have become more partisan because less engaged and more moderate citizens are less likely to show up at the polls. Lelkes et al. (2017) found that the introduction of broadband Internet in the USA influenced the increase in affective political polarization by exposing users to more partisan media content. They concluded that broadband Internet access significantly contributes to increasing partisan hostility, attributing this rise to the enhanced consumption of partisan media online.

In more conventional mass media, Campante and Hojman (2013) found that the introduction of radio and broadcast television contributed to a substantial reduction in partisan polarization among political elites in the USA around the mid-20th century. They proposed two theoretical mechanisms that could explain the findings: the ideological and motivational effects.

The former leads to a decrease in polarization by exposing media users to mainstream political messages. The latter increases the number of politically motivated individuals, which provides incentives for political elites to shift their ideological and policy positions toward the center. This is consistent with the conclusion of Iyengar et al. (2012) that the rise in polarization cannot be attributed to growing ideological differences.

Moreover, Hollander (2008) argued that the media in the USA have become fragmented, and their audiences have become more partisan. His research has revealed that as the media environment has become more fragmented, news audiences have grown more partisan, with a significant shift toward outlets that align with their political beliefs. This migration is attributed to the availability of a broader array of news sources, enabling viewers to select media that reinforces their existing viewpoints.

Davis and Dunaway's (2016) study also supported the idea that media fragmentation is significantly associated with partisan-ideological sorting, that is, the process whereby individuals' political party affiliations become increasingly aligned with their ideological beliefs, primarily among those highly engaged in politics and news consumption. Their results applied both to television and the Internet. The detected political polarization is not specific to the USA alone. Based on data on political polarization from the Varieties of Democracy (V-Dem) Institute dataset, McCoy et al. (2022) concluded that political polarization has been rising in recent decades.

For instance, in all parts of the World, polarization rose from 2000 onwards, while in Europe it rose sharply from 1990 onwards. In this dataset, political polarization was measured by asking country experts the following question: "To what extent is your society divided into mutually antagonistic camps in which political differences affect social relationships beyond political discussions?" (Coppedge et al., 2021). The study finds that depolarization often follows major systemic shocks, such as foreign interventions, independence struggles, violent conflicts,

or regime changes. However, sustaining depolarization proves challenging, with many countries experiencing cycles of polarization and depolarization.

To summarize, these findings highlight the intricate relationship between media consumption patterns and political polarization. The evolution of the media landscape, particularly the rise of digital and social media, has significantly deepened political polarization in developed democracies. Research indicates that increased exposure to negative political campaigning and partisan media content online has heightened affective polarization, not only due to rising ideological differences, but also due to changes in political discourse and media consumption patterns. The proliferation of broadband Internet has facilitated selective exposure to partisan media, exacerbating political divides. Conversely, traditional media, such as radio and television, have historically reduced polarization by promoting mainstream political messages. However, media fragmentation has led to more partisan audiences, further contributing to polarization. This trend is global, with political polarization rising worldwide, particularly in Europe since 1990, often influenced by systemic shocks but proving difficult to sustain in the long term.

MATERIALS AND METHODS

In this study, the following four hypotheses were put forward:

- H1: The total amount of television use will have neither a polarizing nor a mainstreaming effect.
- H2: The use of television to obtain current news information will have a mainstreaming effect.
- H3: The total amount of Internet use will have neither a polarizing nor a mainstreaming effect.
- H4: Internet use for obtaining current news information will have a polarizing effect.

To test these hypotheses, we conducted a hierarchical regression analysis to determine whether the use of political and current events was associated with more extreme political identification, both on television and the Internet. Political polarization is measured in different ways across research studies. Stroud (2010) measured polarization by taking the absolute difference between the attitudes towards Republican and Democrat politicians in the USA. Iyengar et al. (2012) measured polarization using emotions towards members of opposing political parties, concerns about inter-party marriage, and stereotypes of party supporters. The Varieties of Democracy (V-Dem) Institute defines political

polarization as the degree to which society is divided into mutually antagonistic camps, where political differences influence social relationships beyond mere political discussions (Mc Coy et al., 2022). In the current study, political polarization was measured as a more extreme form of political self-identification, that is, a person is more polarized when their political self-identification deviates further from the center position.

Therefore, the questionnaire included the following indicators:

- *Political identification* – from 1 (left) to 10 (right); *political extremism* score was derived in the following manner: 1 and 10 – very high extremism; 2 and 9 – high extremism; 3 and 8 – middle extremism; 4 and 7 – low extremism; 5 and 6 – very low extremism.
- *Party leaning* – (respondents indicated which political party is the closest to their political views, or are members of the party),
- *Frequency of the total television and Internet use* – in hours daily.
- *Frequency of television current news use* – from 1 (never or very rarely) to 5 (very often),
- *Frequency of Internet current news use* – from 1 (never or very rarely) to 5 (very often),
- *Gender* (1 – Male; 2 – Female), *Age*, and *Completed Education* (from 1 – completed university education; 0 – did not complete university education) were used as control variables.

An online opt-in sample (N = 1,021) of the Croatian population (+18) was used in the research. The sample was representative of the general population of the Republic of Croatia in terms of gender and regional distribution. Higher-educated individuals were somewhat overrepresented – 30.3% in the sample versus 24.07% in the general population (Croatian Bureau of Statistics, 2023). The average age of the sample was somewhat lower than the general (18+) population – 47.78 vs. 51.09 (Croatian Bureau of Statistics, 2023). Both discrepancies reflect the selection characteristics of an opt-in online sample. The data were collected by a public opinion polling company in 2023.

Table 1. Sample structure

Variable	Responses	n	%
Gender	Female	501	49.1
	Male	520	50.9
University education	No	712	69.7
	Yes	309	30.3

Variable	Responses	n	%
Age group	18 to 30	149	14.59
	30 to 59	574	56.22
	60 and over	298	29.19
Region	Slavonia and Baranja	173	16.94
	Central Croatia	109	10.68
	Northern Croatia	129	12.63
	Zagreb	280	27.42
	Istria and the Croatian Littoral	123	12.05
	Dalmatia	207	20.27
Total		1021	100.00

Source: Own elaboration

RESULTS

From Table 2, we can see that the largest share of respondents (61.11% of the total) spends between 2 and 5 hours in front of TV screens. Similarly, the share of the respondents who spend between 2 and 5 hours using the Internet amounts to 66.41%. It is also worth noting that 44.47% and 59.26% of respondents consume TV and Internet news about current events, respectively. As for political leaning, 46.69% of the participants expressed a leaning toward a political party on the left or center-left end of the political spectrum, while 38.92% of the participants positioned themselves on the right or center-right end of the spectrum. As for political self-identification, 43.29% of the respondents are classified as a low-extremism group, as they positioned themselves at 5 or 6 on a 1 to 10 scale. Extreme positions (1 and 10) were quite rare (11.17%).

Table 2. Descriptive results

Variable	Responses	n	%
Total time – TV	Less than 2 hours	313	30.66
	2 to 5 hours	644	61.11
	More than 5 hours	84	8.23
Total time – Internet	Less than 2 hours	222	21.74
	2 to 5 hours	678	66.41
	More than 5 hours	121	11.85

Variable	Responses	n	%
Total time – TV news	Very rarely	107	10.48
	Rarely	161	15.77
	From time to time	299	29.29
	Often	345	33.79
	Very often	109	10.68
Total time – INT news	Very rarely	30	2.93
	Rarely	98	9.60
	From time to time	288	28.21
	Often	459	44.96
	Very often	146	14.30
Political leaning	Left	199	23.82
	Centre-Left	191	22.87
	Centre	120	14.37
	Centre-Right	256	30.66
	Right	69	8.26
Political extremism	Very low	442	43.29
	Low	183	17.92
	Middle	192	18.81
	High	90	8.81
	Very high	114	11.17
Total		1021	100.00

Source: Own elaboration

To test the stated hypotheses, ordinal regression analysis was initially used as a data analysis method; however, the parallel lines test was statistically significant, indicating that the proportional odds assumption was violated. Therefore, multinomial regression analysis was subsequently used to test the hypotheses, given that it does not require the aforementioned assumption. No significant multicollinearity between the predictors was detected. The reference value of the criterion variable (political extremism) was “very low”.

In the first model, the total time spent watching television and the total time spent following the Internet were included as the predictors. As control variables, gender, level of education, and age were included in the model. In the second model, the frequency of searching for information about current events on television and the frequency of searching for information about current events on the Internet were used as predictors. To test whether people with the same political leaning have different political self-identifications depending on the amount of use of current events information on television and the Internet, political leaning was also included in the regression in the third model. In the fourth model, a variable measuring whether the research participant expressed

closeness to a political party was entered as a predictor. The rationale for using this predictor is to test whether the level of political interest, measured by the presence of a political leaning towards a political party, can serve as a proxy variable to account for the connection between current-events media use and political self-identification. In other words, it is possible that people with more interest in politics more often inform themselves about current events, and at the same time are more likely to position themselves at the extreme points of the political self-identification scale. Therefore, the inclusion of the existence of political leaning served as an attempt to detect a possible spurious correlation between media use and political extremism.

The results from Model 1 indicate that the total time spent on TV and Internet use was not statistically significantly associated with the level of political extremism. As for socio-demographic predictors, older age was associated with a higher likelihood of being in other response categories in comparison to being in the very low category. Females were less likely than males to belong to the low and middle categories compared to being in the very-low category. People with higher education were less likely to belong to the low or high categories than to the very low category.

From Model 2, we observe that individuals who used the Internet for current news were more likely to belong to the middle, high, and very high categories of political extremism than to the very low category. The more frequent use of television for current news made people less likely to belong to the very high category than to the very low category. From the results of Models 3 and 4, we conclude that the results remained similar, even when political leaning and its very existence were considered. The only difference from Model 2 was that when the existence of party leaning was entered as a predictor, the more frequent use of TV for current news information made a person less likely to belong to the high category, and not only to the very high category, thus more strongly confirming the mainstreaming effect of television.

Table 3. Estimated effects of the selected predictors on *political extremism* using a multinominal logistic regression model – exp(B)

Model 1		Low	Middle	High	Very high
TV time daily		1.02	1.06	0.99	1.10
Internet time daily		0.96	0.98	1.02	1.05
Age		1.02*	1.03**	1.05**	1.02*
Gender	Male	1.84**	1.70*	1.16	1.00
	Female (ref.)	-	-	-	-
University education	No	0.52**	0.71	0.56*	1.08
	Yes (ref.)	-	-	-	-

Model 2		Low	Middle	High	Very high
TV News		0.99	0.87	0.81	0.72*
Internet News		1.21	1.58**	1.42*	1.52**
Age		1.01*	1.03**	1.05**	1.03**
Gender	Male	1.81**	1.67*	1.17	1.04
	Female (ref.)	-	-	-	-
University education	No	0.54	0.76	0.59*	1.17
	Yes (ref.)	-	-	-	-
Model 3		Low	Middle	High	Very high
TV News		0.98	0.84	0.83	0.67**
Internet News		1.15	1.51**	1.43*	1.55*
Age		1.02*	1.03**	1.04**	1.03*
Gender	Male	1.62*	1.61*	1.13	1.00
	Female (ref.)	-	-	-	-
University education	No	0.50*	0.67	0.54*	1.02
	Yes (ref.)	-	-	-	-
Party leaning	Left	1.55	1.49	0.91	0.62
	Center-left	1.57	1.52	0.94	1.26
	Center	0.60	0.33*	0.14**	0.29*
	Center-right	2.33*	1.62	0.41	0.65
	Right (ref.)	-	-	-	-
Model 4		Low	Middle	High	Very high
TV News		0.97	0.84	0.77*	0.69**
Internet News		1.18	1.51**	1.34*	1.43*
Age		1.01*	1.03**	1.05**	1.03**
Gender	Male	1.73*	1.59*	1.10	0.97
	Female (ref.)	-	-	-	-
University education	No	0.53**	0.75	0.57*	1.14
	Yes (ref.)	-	-	-	-
Party leaning	No	0.46**	0.34**	0.20**	0.17**
	Yes (ref.)	-	-	-	-

* p < 0.05 / ** p < 0.01; Reference category = very low.

Source: Own elaboration

Predicted probabilities provide a more intuitive interpretation of ordinal regression results than odds ratios, as they directly show the estimated likelihood of belonging to each category of political extremism at different levels of media consumption. Unlike odds ratios, which indicate only the direction and relative strength of associations, predicted probabilities illustrate the substantive magnitude of these effects in an easier and more visually interpretable way.

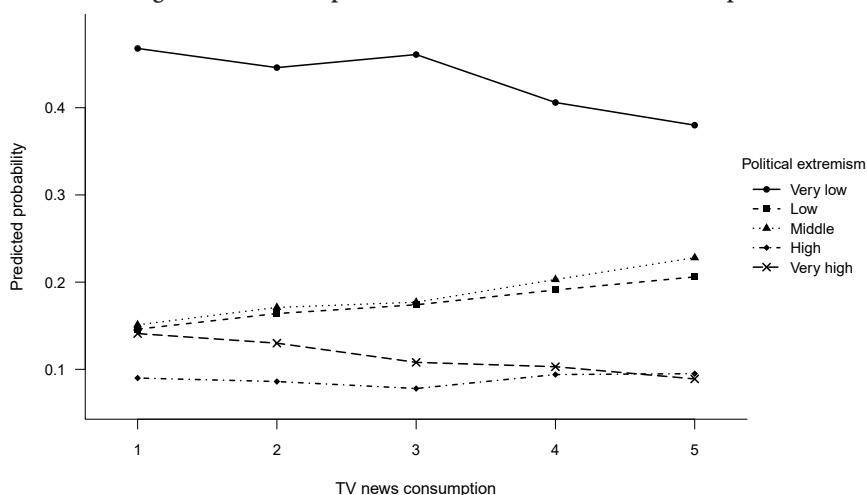
Figure 1 shows predicted probabilities of political extremism across various levels of television news consumption. We can note that the most probable category across all levels of TV news consumption remains “Very low” extreme position, with its predicted probability declining substantially as television news consumption increases. At the lowest level of TV news consumption (Level 1), the probability of belonging to the “Very low” category is approximately 0.47 (47%), and by the highest level of TV news consumption (Level 5), this probability falls to 0.38 (38%). This represents a decline of approximately 9 percentage points, or nearly a 20% relative decrease. Thus, we conclude that individuals who consume television news more frequently are less likely to be in the least extreme political category.

At the same time, the probabilities of intermediate categories increase steadily, with the probability of belonging to the “Middle” extremism category rising from approximately 0.15 (15%) at TV consumption level 1 to about 0.23 (23%) at level 5. This is a significant increase of about 8 percentage points, representing more than a 50% relative increase. Similarly, the “Low” extremism category increases from around 0.15 to approximately 0.21. We can conclude that these changes indicate that television news consumption is associated with a shift toward moderate or intermediate political positions.

We can also note that the “Very high” extreme orientation category shows the clearest decline, as its predicted probability decreased from approximately 0.14 (14%) at the lowest level of television news consumption to around 0.09 (9%) at the highest level. In relative terms, this corresponds to a decline of roughly 36%. The “High” extremism category remains comparatively stable across the observed range, fluctuating between approximately 0.08 and 0.10.

From Figure 1, we can also note the changing relationship between the “Very low” and “Very high” categories. At TV news consumption level 1, respondents are approximately 3.4 times more likely to belong to the “Very low” category than the “Very high” category (0.47 vs. 0.14), while at level 5, this ratio increases to approximately 4.2 (0.38 vs. 0.09). Thus, although the probability of “Very low” extremism also declines with greater TV news consumption, the probability of “Very high” extremism declines even more strongly. In relative terms, higher television news consumption is increasingly associated with a lower probability of holding the most radical political position.

Figure 1. Predicted probabilities – Television news consumption



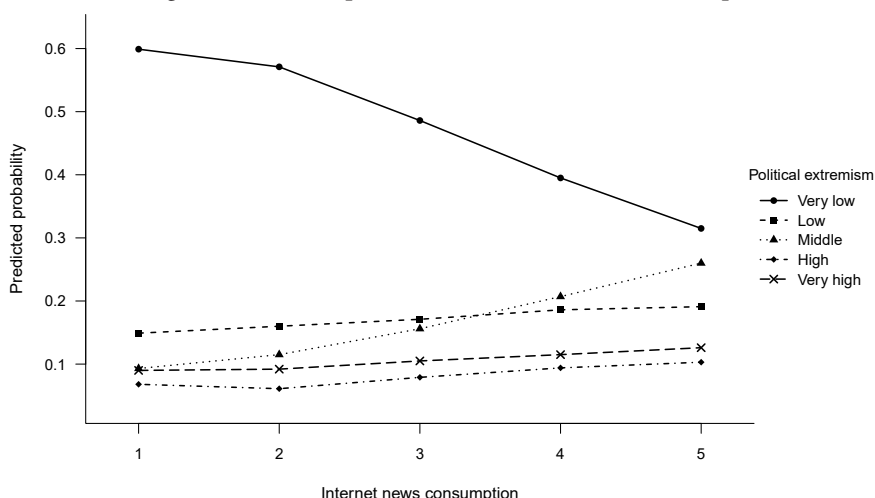
Source: Own elaboration

Figure 2 shows predicted probabilities of political extremism across all levels of Internet news consumption, and this figure shows a markedly different pattern from the television news model, suggesting that internet news consumption is associated with a broader shift toward greater political extremism. Most notably, the probability of belonging to the “Very low” extremism category declines sharply with increasing internet news consumption. Namely, among respondents with the lowest level of internet news consumption, the predicted probability of very low extremism is about 0.60, but it decreases steadily to around 0.32 among those with the highest level of internet news consumption. This substantial decline indicates that intensive exposure to online news environments is associated with movement away from the least extreme political positions.

At the same time, all other categories of extremism increase as internet news consumption rises. The strongest increase is observed for the “Middle” extremism category, whose predicted probability grows from 0.09 to 0.26 across the observed range of internet news consumption. The “Low” category also increases moderately, rising from around 0.15 to 0.19.

Importantly, unlike the television news model, the probabilities of the higher-extremism categories (“High” and “Very high”) also increase with higher internet news consumption. The “Very high” category rises from 0.09 to 0.13, while the “High” category increases from 0.07 to 0.10. Although these changes are more modest than those observed for the middle category, they are substantively important because they indicate that increased internet news consumption is associated not only with moderation away from very low extremism, but also with a gradual increase in the likelihood of stronger forms of extremism.

Figure 2. Predicted probabilities – Internet news consumption



Source: Own elaboration

DISCUSSION

We have already noted the trend of political polarization in Croatia (Pavić, 2024), which aligns with similar patterns observed in other countries, particularly in Western democracies. For instance, Varga and Buzogány (2020) demonstrated how right-wing populist parties in Poland and Hungary have reshaped foreign policy in ways that challenge core liberal democratic values, indicating a similar trend of polarization in these countries. Van Beek (2022) examined the growing influence of populism across various nations, focusing on the tensions between nationalism and globalization and their impact on democracy. In the United States, political polarization has become one of the most significant features of society in the 21st century, with ideological conflicts between the major parties, Democratic and Republican, significantly increasing over the past six decades (Iyengar et al., 2019).

The results of this study partially confirm the hypotheses regarding media consumption and political polarization. While the total mainstreaming effect of television was not established, thus confirming H1, the specific television mainstreaming effect (H2) was only partially confirmed. The frequency of following current news on television differed only between the lowest and the highest groups in terms of political polarization. The polarizing effect of the overall Internet use was not detected, thus confirming H3. However, the polarizing effect of consuming Internet news about current events (H4) was confirmed, even among individuals with the same political leanings, and even among people with

the same level of political interest, as measured by the proxy variable of political leaning. These findings align with research from other countries. For example, Lelkes et al. (2017) found that increased Internet access was associated with higher levels of partisan affect and ideological polarization in the United States. This suggests that the Croatian experience may be part of a broader trend related to the changing media environment. Similarly, Flaxman et al. (2016) investigated the phenomena of “filter bubbles” and “echo chambers” in online news consumption, which further support our findings on the polarizing effect of Internet news.

An alternative explanation of our results relates to the partisan exposure hypothesis, which maintains that people choose media congruent with their preexisting views, implying reverse causation and limited media effects. However, as Stroud (2010) noted, the partisan selective exposure hypothesis is no longer connected to the limited media effects perspective. The fact that people selectively choose media outlets that align with their convictions does not mean that such media exposure does not reinforce their beliefs, thereby making them more polarized. In a study using lagged panel regression, Stroud (2010) found that selective exposure predicted later political polarization but also found some evidence for reverse causation, thus suggesting possible spiraling effects. These findings have been corroborated by subsequent research. For instance, Dvir-Gvirsman et al. (2016) conducted a three-wave panel study in Israel, confirming Stroud’s results. They found that ideological selectivity led to increased polarization over time, and this polarization, in turn, also increased subsequent selectivity, providing further evidence of spiraling effects. Similarly, Weeks et al. (2017) used a two-wave panel survey to demonstrate that selective exposure to partisan news sources predicted increases in affective polarization, while affective polarization also predicted subsequent selective exposure, supporting the notion of a reinforcing spiral.

Another question that follows from our results is whether the media are to blame for the increased polarization. The media may just be picking up cues from increased elite polarization, thus producing more polarized content. For instance, Hetherington (2001) demonstrated that the increase in partisan identification in the United States during the 1990s can be attributed to the greater ideological polarization between partisan elites in Congress, which clarified public perceptions of party ideologies. Hetherington also found that both the perception of elite polarization and real elite polarization contributed to partisan-ideological sorting, i.e., to the congruence between partisan affiliation and ideological self-placement. Furthermore, Druckman et al. (2013) demonstrated that elite polarization influences how citizens process media information. In polarized environments, partisans tend to engage in motivated reasoning, seeking out information that confirms their pre-existing beliefs and discounting contradictory evidence. This suggests that while media may not be the primary

cause of polarization, they play a crucial role in reinforcing and potentially exacerbating existing divisions. However, it is important to note that the relationship between media, elite polarization, and mass polarization is not unidirectional. As Prior (2013) argues, changes in the media environment, such as the rise of cable news and later the advent of social media, have also contributed to elite polarization by allowing politicians to communicate more directly with their base and reducing the need for compromise. In the Croatian context, the rise of populist parties since 2015 has introduced new dynamics to the political landscape, potentially contributing to increased polarization. Nikić Čakar and Čular (2022) noted that the presence of these parties has led to greater instability in government formation and coalition-building processes, which may be reflected in more polarized media coverage and public discourse. This aligns with broader European trends, as evidenced by research conducted in five countries (Germany, Poland, Turkey, Mexico, and the USA) that identified the creation of a new political cleavage between cosmopolitans and communitarians, causing divisions within the electorate and party structures in established parties (De Vries, 2018). However, it is important to note that the relationship between media consumption and polarization is complex and may vary across different cultural and political contexts. Prior (2013) emphasized the need to consider multiple factors when examining media effects on political polarization.

For instance, the “traditional” media landscape in the United States exhibits a significantly higher degree of polarization and political alignment compared to the more mainstream-oriented media in Croatia. This difference in media environments can have profound implications for political polarization and public discourse in these countries. In the United States, research has consistently shown a high level of partisan bias in media consumption and trust. A comprehensive study by the Pew Research Center (2021) found that Republicans and Democrats in the United States turn to and trust two distinct and divergent media environments. Fox News stands out as the dominant source of political news for Republicans, while CNN plays a similar role for Democrats. This division creates what scholars refer to as “echo chambers,” where individuals consume news that primarily confirms their existing political views (Garrett, 2009). Conversely, the Croatian media landscape, especially television, does not exhibit such a pronounced division along political lines. The Croatian media landscape still comprises a significant role for public television, which tends to be under public scrutiny to remain politically neutral. Although sometimes unsuccessful, the idea of political neutrality in the media is strong in most Croatian mainstream media outlets and can have a depolarizing effect. Croatian traditional media outlets tend to be more mainstream-oriented, aiming to reach a broader audience without stark political polarization. For example, as in the case of public television, national private television networks do not have a clear

political orientation, i.e., they are not publicly perceived as close to certain political movements or parties. This difference can be attributed, in part, to varying media traditions and political cultures in the two countries. The U.S. media system encourages audience fragmentation along political lines, whereas Croatian media outlets strive to maintain a broader consensus in their reporting (Peruško et al., 2021). The consequences of these differing media environments are significant. In the U.S., the polarized media landscape has been linked to increased political polarization among the public (Levendusky, 2013). In contrast, the more mainstream approach of Croatian traditional media (television and radio) may contribute to a less polarized political discourse. However, this relationship requires further investigation in the Croatian context. These observations underscore the importance of considering the broader media environment when examining the relationship between media consumption and political polarization, as the structure and norms of media systems can significantly influence the degree and nature of political divisions within a society.

CONCLUSION

Building on cultivation theory and the reinforcing spirals model (RSM), this study examines the relationship between traditional and digital media consumption and political polarization in Croatia. The results demonstrate that Internet news consumption is associated with more extreme political positions, whereas television news consumption corresponds with more moderate political positions. These findings support the assertion that digital media environments can foster polarization through mechanisms such as selective exposure and the creation of echo chambers, while traditional television news may exert a moderating influence on its viewers. This dynamic exemplifies the interplay between media cultivation and the reinforcing spirals model by highlighting the role of digital media environments in contributing to polarization. The study further emphasizes the importance of modern media in shaping political identities and underscores the need to better understand media effects in rapidly evolving digital environments.

Since Internet news consumption proved to be positively associated with higher levels of political extremism, even when controlling for political orientation, educational interventions should prioritize enabling citizens to critically assess online political content, recognize manipulative or emotionally polarizing communication strategies, and understand algorithmic filtering and selective exposure. Consequently, media literacy programs should expand their focus beyond addressing “fake news” to encompass how digital media environments can intensify ideological attitudes and reinforce political polarization. The findings

suggest that mainstream television news continues to serve as an integrative or moderating force within democratic societies, as increased television news consumption in our study was linked to a lower likelihood of extreme political orientations and a greater prevalence of moderate positions. This implies that professionally regulated and institutionally accountable media environments can help mitigate ideological fragmentation. Accordingly, public service broadcasting and high-quality mainstream and gate-keeping journalism remain essential democratic institutions, especially within increasingly fragmented and polarized digital information environments.

These findings further indicate that future research and policy discussions should distinguish among different media types rather than treating “media consumption” as a homogeneous phenomenon, thereby enabling more nuanced interpretations of cultivation theory. Traditional television news and online news environments employ distinct approaches to presenting political positions. Consequently, regulatory debates, civic education strategies, and democratic resilience policies should consider these differences rather than assuming uniform media effects. Future research should also focus on a more detailed discovery of the mechanisms behind the media’s influence on political and social polarization, especially when it comes to the application of in-depth qualitative research.

This study has several limitations. First, although the online opt-in sample was representative in terms of gender and regional distribution, higher-educated individuals were over-represented, and the average age was lower than that of the general population. This could affect the generalizability of the results. The study’s cross-sectional nature implies that it can identify correlations but cannot reliably establish causality and its direction. However, previous studies and theoretical approaches suggest that cultivation and self-cultivation are indeed mutually reinforcing interwoven processes, which somewhat downplays the importance of detecting a unidirectional causal relationship. Finally, political polarization was calculated from self-reported political identification, which is only one of many possible measures of a complex phenomenon that encompasses affective, social, and ideological dimensions.

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