THE INTERACTIVE EFFECT OF MEDIA BIAS AND ELECTION PROXIMITY ON POLITICAL KNOWLEDGE

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ABSTRACT

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This thesis investigates the interactive effects of temporal proximity to elections and media bias against opposition on political knowledge. The findings suggest that, in countries with biased media environments, voters are less accurate in placing political parties on ideological scales compared to their counterparts in countries with free media environments. Furthermore, since the inflow of political information immensely increases when elections are imminent, citizens tend to exhibit higher levels of political knowledge shortly before or after an election and such heightened levels of political knowledge disappear throughout the electoral cycle. Perhaps more importantly, this thesis demonstrates that the effect of temporal proximity to elections is contingent on media bias. While the average accuracy of identifying party positions fluctuates severely throughout the electoral cycle in countries with considerable media bias, this accuracy remains stable in the remainder of the cases. Besides, the negative effect of time passed since the previous election is observable only in countries with biased media environments. This thesis also seeks to explore the individual determinants of political knowledge in countries with highly biased media environments. Owing to its fragmented and polarized media landscape, Turkey serves as a suitable case study for this exploration. The empirical analyses show that Turkish citizens' attitudes towards political parties have substantial effects on their political knowledge. Turkish voters are more accurate in identifying the ideological stances of parties that are either from very distant or own ideological stand. Furthermore, voters who strongly favor one party over the others are significantly less accurate in placing even the parties with marginally distant ideological stances. Having positive attitudes towards political parties also increases the accuracy of voters' placements of corresponding parties. In addition, Turkish voters who follow newspapers more frequently are more accurate in their placements of political parties. However, newspaper readership enhances voters' accuracy of placing only the parties they dislike. Lastly, this thesis offers limited empirical support for the effect of TV consumption on political knowledge.

ÖZET

MEDYA TARAFLILIĞI VE SEÇİMLERE YAKINLIK ETKİLEŞİMİNİN SİYASİ BİLGİYE ETKİLERİ

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Bu tez medya taraflılığı ve seçimlere yakınlık etkileşiminin siyasi bilgiye etkisini incelemektedir. Ampirik bulgular, tarafgir medya kuruluşlarına sahip ülkelerde, seçmenlerin, siyasi partileri ideolojik bir skala üzerine yerleştirme konusunda, tarafsız medya kuruluşlarının bulunduğu ülkelerde yaşayan seçmenlere göre daha az başarılı olduğunu göstermektedir. Ayrıca seçimler yaklaştığında siyasi haber akışı önemli ölçüde arttığı için, seçimlerden hemen önce, seçmenlerin daha fazla siyasi bilgi sahibi oldukları gözlemlenmektedir ve bu yüksek bilgi düzeyi seçim döngüsü süresince kaybolmaktadır. Daha önemlisi, bu tez seçimlere yakınlığın etkisinin medya taraflılığına bağlı olduğunu göstermektedir. Siyasi partilerin duruşlarını tespit etmedeki başarı, seçim döngüsü boyunca dikkate değer ölçüde medya taraflılığı gösteren ülkelerde ciddi bir şekilde dalgalanırken; bu başarı, geri kalan durumlarda sabit kalmaktadır. İlaveten, bir önceki seçimlerin ardından geçen zamanın negatif etkisi yalnız taraflı medya kuruluşlarına sahip ülkelerde görülmektedir. Bu tez aynı zamanda yüksek oranda taraflı medya bağlamları bulunan ülkelerde siyasi bilginin birey düzeyindeki etkenlerini incelemektedir. Parçalanmış ve kutuplaşmış medya ortamı sayesinde, Türkiye bu inceleme için uygun bir vaka çalışması olarak gözükmektedir. Ampirik analizler göstermektedir ki; Türk vatandaşlarının siyasi partilere karşı tutumları, siyasi bilgi düzeyleri üzerinde önemli bir etkiye sahiptir. Türk seçmenler, kendilerinden ideolojik olarak çok uzak ya da kendilerine çok yakın olan partilerin duruşlarını tanımlamakta daha başarılıdır. Ayrıca bir partiyi diğerlerine göre şiddetle tercih eden seçmenler, kendilerinden çok az farkla uzak ideolojik duruşlara sahip partileri yerleştirmekte dahi daha az başarılıdır. Partilere yönelik olumlu tutumlara sahip olması, seçmenlerin bu partileri yerleştirmekteki başarısını arttırmaktadır. Bununla beraber, gazeteleri daha sık takip eden Türk seçmenleri siyasal partilerin duruşlarını tanımlamada daha başarılıdır. Öte yandan, gazete okurluğu yalnızca seçmenlerin sevmedikleri partileri tanımlamadaki başarılarını arttırmaktadır. Son olarak, bu tez televizyon tüketiminin siyasi bilgiye etkisi üzerine kısıtlı ampirik destek sunmaktadır.

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To my family.

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1. INTRODUCTION

Recent decades have witnessed the proliferation of new communication technologies, such as cable TV, the Internet, and social media platforms. Thanks to these advances, citizens' information resources have drastically increased. Many have celebrated these advances believing that they would give rise to societies that demonstrate higher levels of politically relevant knowledge. More specifically, many have argued that advances in communication technologies would provide individuals with better opportunities to acquire political information. More informed publics would better understand the dynamics of political systems and they would be able to hold political officials accountable (Fowler and Margolis 2014). Considering that political knowledge is a fundamental resource for the survival and sustainability of democracy, many have also expected such advances in communication technologies to produce more consolidated democratic regimes. However, students of political knowledge have demonstrated a rather pessimistic reality about contemporary democracies and citizenries: in most countries, the masses are not politically well informed, if not politically illiterate (Luskin 1990; Prior 2005). Similarly, recent scholarship suggests that political information is not equally distributed both within and across countries (e.g. Abrajano 2015; Iyengar et al. 2010; Luskin 1990; Mondak and Anderson 2004; Prior 2005). Consequently, investigating the individual and contextual determinants of political knowledge provides a fertile ground for research.

Prior research on the topic demonstrates that three factors shape citizens' level of political sophistication: their cognitive ability, motivation to obtain politically relevant information, and the availability of such information in the environment (Carpini and Keeter 1996; Luskin 1990). The first two of these factors depend heavily on individual traits, such as intelligence, education, or occupation. Accordingly, there is vast empirical support for the individual determinants of political knowledge. For instance, scholars find strong empirical support for the existence of a significant and substantial positive effect of education on political knowledge (e.g., Andersen, Tilley, and Heath 2005; Clark 2014; Eveland and Scheufele 2000; Galston 2001; Gordon and Segura 1997; Iyengar et al. 2010; McAllister 1998). Furthermore, many studies have concluded that there is a "gender gap" in terms of political knowledge. In other words, on average, men perform better than women on knowledge questions (Delli Karpini and Keeter 1996; Dow 2009; Wolak and McDevitt 2011). Lastly, another strand of research, that is particularly important for this thesis,

demonstrates that high levels of exposure to news media are significantly and positively associated with political knowledge (Couldry, Livingstone, and Markham 2010; DellaVigna and Kaplan 2007; Elo and Rapeli 2010; Eveland and Scheufelle 2000; Schroeder and Stone 2015).

Country-level, contextual determinants of political knowledge have also attracted substantial scholarly attention in the past. These factors have a major impact on the levels and distribution of political knowledge since they alter the costs associated with gathering political knowledge or provide citizens with additional incentives to seek such knowledge (Berggren 2001; Gordon and Segura 1997). For instance, several scholars have examined the roles of party systems (Fortunato, Stevenson, and Vonnahme 2014; Gordon and Segura 1997; Vegetti, Fazekas, and Méder 2017), electoral laws (Berggren 2001; Sheppard 2015), and electoral timing (Andersen, Tilley, and Heath 2005; Berggren 2001; Gordon and Segura 1997; Nicholson 2003) in determining the levels and distribution of political knowledge. In addition, many citizens rely on the information that they receive from media outlets, and media's decisions regarding what to cover and how to cover certain issues have a significant effect on citizens' levels of political knowledge (Gerber, Karlan, and Bergan 2009). Individuals who reside in countries where media outlets are free from government interventions demonstrate higher levels of political knowledge compared to their counterparts in countries where governments frequently interfere with media outlets (Leeson 2008; Jerit, Barabas, and Bolsen 2006; Schoonvelde 2014).

Following the literature, in the first empirical chapter of this thesis, relying on individual-level data from the European Election Studies, I argue and empirically demonstrate that in countries where media bias in terms of the coverage of opposition parties and candidates is more pronounced, average level of political knowledge is lower simply because when available political information is scarce, even those who have the socioeconomic resources to acquire high levels of political knowledge might fail to do so. Furthermore, I argue that electoral proximity has a substantial effect on political knowledge. As the elections become imminent, political information inflow drastically increases and informs the public even in countries where media bias against opposition is prevalent. Extending the existing scholarship, I also illustrate that the effect of electoral proximity on political knowledge is non-linear. To put it simply, as the media provide vast amounts of political information right before the elections, citizens' exposure to political news immensely increase (Abney et. al. 2013; Andersen, Tilley, and Heath 2005; Michelitch and Utych 2018), and this results in higher levels of political knowledge during the campaign period. Individuals tend to exhibit this enhanced political knowledge briefly after the elections as well, because media outlets still cover the outcomes of the elections. As the media's attention to politics diminishes over the course of the electoral cycle, its positive effect on citizens' political knowledge disappears.

To the best of my knowledge, no prior study has investigated the interactive effects of media bias and temporal proximity to elections on political knowledge. In this thesis, I seek to fill

this gap in literature by demonstrating that the effect of temporal proximity to elections on political knowledge is contingent on media freedom. The analyses in the first empirical chapter reveal that while the average accuracy of identifying ideological stances of political parties fluctuates throughout the electoral cycle more severely in countries where media bias against the opposition is more pronounced, this accuracy remains almost constant in countries with average or low levels of media bias. Perhaps more importantly, while the average level of political knowledge decreases in countries where media bias against the opposition is prevalent over the course of the electoral cycle, it stays almost constant, if not increases, in other cases. I believe this contribution to the literature is important as this study would produce a dynamic understanding of political knowledge that highlights the importance of the temporal fluctuations in addition to the widely studied individual and contextual determinants.

To address the dynamics of these fluctuations in political knowledge and explore the ways individuals acquire political information in fragmented and censored media environments, the second empirical chapter of this thesis focuses on Turkey, a country characterized by a fragmented and polarized media landscape (Yanatma 2018), and further investigates the individual determinants of political knowledge. The Turkish media landscape is also characterized by high levels of bias against the opposition (Çarkoğlu, Baruh, and Yıldırım 2014; Moral and Çarkoğlu 2018; Yıldırım, Baruh, and Çarkoğlu 2020). Consequently, studying the individual determinants of political knowledge in Turkey would help me produce valuable insights for understanding the variations in political knowledge in societies with highly biased media environments. The determinants of political knowledge in Turkey are rarely studied (for exceptions, see: Andı, Aytaç, and Çarkoğlu 2019; Moral and Çarkoğlu 2018). Therefore, the second empirical chapter touches upon an unexamined aspect of Turkish public opinion literature. It also offers a novel theoretical framework and related empirical analyses as the chapter connects voters' attitudes towards political parties and their media consumption patterns to the levels of political knowledge they possess.

The second empirical chapter aims to demonstrate that Turkish citizens' attitudes towards political parties have substantial effects on their political knowledge. The empirical analyses suggest that Turkish voters are more motivated to seek information about the parties they are ideologically closer to and the parties towards which they have positive feelings. This motivation gives rise to an increased level of accuracy in identifying the ideological stances of those parties. Due to the polarized nature of the media landscape in Turkey, media outlets tend to emphasize the differences between ideologically distant parties. Consequently, the analyses of the second empirical chapter indicate that Turkish voters are also more accurate in identifying the ideological stances of parties that are ideologically distant from their views. In a similar vein, I demonstrate that voters who strongly favor one party over the others are less motivated to acquire information about the other parties. In other words, Turkish voters who exhibit high levels of affective polarization are less accurate in their ideological placements of the parties.

The empirical analyses part also illustrates that the effect of ideological distance on political knowledge is contingent on affective polarization. While highly polarized individuals are significantly less accurate in placing parties that marginally diverge from them on the ideological scale, this effect diminishes for non-polarized individuals. Lastly, in line with the previous literature, media consumption patterns substantially affect Turkish voters' political knowledge. I argue and demonstrate that those who frequently follow newspapers are more accurate in identifying the positions of parties they dislike, and albeit limited, TV channel preferences also have a significant effect on political knowledge.

This thesis is organized as follows: the next chapter, first, describes the operationalization of political knowledge and presents the findings in the literature on the determinants of political knowledge. After illustrating the theoretical framework, I provide empirical support for the theoretical expectations by investigating cross-country variance in political knowledge in the European context. The third chapter explores the dynamics and determinants of political knowledge in Turkey, a country characterized by its polarized and biased media environment. Before presenting the empirical findings, I elaborate on the historical transformation of the Turkish media landscape and the existing literature. I conclude each empirical chapter by discussing the extent the analyses provide support for the stated hypotheses, their limitations, and possible directions that future research could move towards.

2. THE INTERACTIVE EFFECT OF ELECTORAL PROXIMITY AND MEDIA BIAS ON POLITICAL KNOWLEDGE

2.1 Introduction

The literature on political knowledge has demonstrated a pessimistic reality about contemporary democracies: in most of these countries, the masses are not politically well informed, if not politically illiterate (Luskin 1990; Prior 2005). Contrary to common perceptions, despite the proliferation of cable TV and the Internet, there is very little empirical evidence indicating an increase in average political knowledge or amelioration of its unequal distribution. This contradiction has grabbed the attention of political science scholars as political knowledge is a fundamental resource for the survival and sustainability of democracy. In its most basic sense, citizens should exhibit a certain level of political knowledge to be able to hold political officials accountable (Fowler and Margolis 2014). Furthermore, an unequal distribution of political knowledge within societies produces electoral outcomes that significantly diverge from the best interests of disadvantaged social groups. In short, the distribution of political knowledge matters both at the individual and social levels, as it directly alters individuals' or groups' ability to participate in the collective decision making, assess the consequences of these processes and hold political agents accountable when these agents act against public's best interest.

Scholars have identified many individual and contextual determinants that affect the levels of political knowledge. Demographic factors such as education or intelligence, appear to have a substantial impact on political knowledge since these are positively associated with individuals' cognitive abilities. High levels of cognitive abilities allow individuals to collect and process higher volumes of political information (Luskin 1990). Furthermore, having the motivation to gather political knowledge also explains a substantial variance in individuals' political knowledge. Individual and contextual determinants alter citizens' motivation to acquire political knowledge. For instance, professionals, managers, or skilled workers have a higher motivation to follow political news compared to blue-collar workers (Clark 2014). In addition, the disproportionality of the electoral systems reduces the

motivation to acquire political knowledge, as voters recognize the fact that their votes might not alter the electoral outcome in accordance with their preferences (Gordon and Segura 1997). Lastly, some contextual factors affect the availability of political information; in turn, altering the distribution of political knowledge within societies. Since the media outlets serve as the primary source of political information (Gerber, Karlan, and Bergan 2009), scholars have often investigated the role media play in shaping the political knowledge of individuals.

The literature offers a vast amount of empirical support for the effect of media freedom and the media's coverage of political issues on political knowledge. The frequency and magnitude of government interferences with the media outlets are among the most widely investigated aspects of the relationship between media freedom and political knowledge (for instance, see Leeson 2008; Jerit, Barabas, and Bolsen 2006; Schoonvelde 2014). In this chapter, I seek to demonstrate that, controlling for a variety of individual-level factors, media bias against the opposition has a substantial impact on the political knowledge of citizens. In other words, when media outlets do not cover or undercover the policies or ideological stances of opposition candidates and parties, citizens exhibit lower levels of political knowledge.

Furthermore, I argue that media bias against opposition not only has a direct effect on political knowledge, but it also mediates the effects of other key variables, such as electoral proximity. Current literature suggests that right after or before an election, individuals tend to know more about politics and policy stances of parties (Andersen, Tilley and Heath 2005; Berggren 2001; Gordon and Segura 1997; Nicholson 2003). I extend this finding by incorporating media bias against opposition into the analysis and argue that the effect of electoral proximity is contingent on media bias. More specifically, in countries where media bias against the opposition is prevalent, average political knowledge tends to be lower and fluctuate more severely compared to countries with free media environments. I think this contribution to the literature is important as this analysis would produce a dynamic understanding of political knowledge that accounts for the temporal fluctuations in addition to widely studied individual and contextual determinants.

This chapter is organized as follows: first, I will briefly discuss the findings of the prior research on the determinants of political knowledge. Second, I will elaborate on the deficiencies of the current literature and delineate the theoretical framework that fills out the gaps in the literature. In the following section, I will present the empirical findings that provide empirical support for the hypotheses in Section 3. Lastly, I will comment on the empirical findings and describe the limitations of this analysis.

2.2 Literature Review

Political knowledge has attracted substantial scholarly attention for a simple reason: it serves as a fundamental resource for a well-functioning democracy. Although there is no doubt about its essentiality, scholars have long demonstrated that many individuals suffer from low levels of political knowledge, and there are wide discrepancies within social groups in terms of average political knowledge (e.g., Abrajano 2015; Iyengar et al. 2010; Luskin 1990; Mondak and Anderson 2004; Prior 2005). The unequal distribution of political knowledge within societies, as well as the common "political illiteracy" of citizens have cast doubt on the sustainability and functioning of democracy. Additionally, scholars have been puzzled by the persistence of the unequal distribution and low levels of political knowledge in a world where the political information offered to the public drastically increased owing to the advanced communication technologies and diverse media environments (Prior 2005). Earlier research addressing the determinants of political knowledge mainly focused on individual-level factors, such as education, income, and intelligence. In the past decades, scholars have spent an increasing effort on investigating the contextual determinants of political knowledge, such as political institutions and party systems. A major line of research that is particularly important for this chapter analyzes how media shape the distribution and levels of political knowledge. In this section, I will briefly discuss the findings of prior research firstly on the individual determinants, secondly on the contextual determinants of political knowledge, and lastly on the impact of media on political knowledge.

Scholars of political knowledge mostly agree on three factors that shape citizens' level of political sophistication: the *cognitive ability* of the individual, *motivation* to obtain politically relevant information, and the *availability* of such information in the environment (Carpini and Keeter 1996; Luskin 1990). The first two of these factors depend heavily on individual traits, such as intelligence, education, or occupation. Accordingly, there is vast empirical support for the individual-level determinants of political knowledge. Comparative studies of political knowledge reveal a significant and substantial positive effect of education on political knowledge (Andersen, Tilley, and Heath 2005; Clark 2014; Eveland and Scheufele 2000; Galston 2001; Gordon and Segura 1997; Iyengar et al. 2010; McAllister 1998).[1]The theoretical explanation of this positive effect is straightforward: higher levels of education enable individuals to comprehend and acquire higher levels of political knowledge as it enhances their "cognitive abilities." On the other hand, many scholars argue that this substantial effect of education is contingent on other factors and there is a nuanced relationship between education and political knowledge. For instance, Marinova (2015) demonstrates that as the party system stability decreases, the positive effect

[1]For a counter-argument see Luskin 1990.

of education disappears, or Jerit and colleagues (2006) argue that the positive effect of education vanishes when the mass media fail to provide politically relevant information.

Scholars of political knowledge have also studied the effect of gender on political knowledge. This field of research have produced substantial empirical evidence for the existence of a gender gap in terms of political knowledge. Most of these studies have concluded that, on average, men perform better than women on batteries of knowledge questions (Delli Karpini and Keeter 1996; Dow 2009; Wolak and McDevitt 2011). On the other hand, many scholars have raised doubts on this conclusion, claiming that the difference between genders in terms of political knowledge might instead stem from men's higher propensity to guess in surveys (Mondak and Anderson 2004), or some "survey instrument-related factors," such as the content or difficulty of the questions (Jessica Fortin-Rittberger 2016). Furthermore, Fraile (2014) argues that this difference between men and women is contingent on age and education. In other words, this "knowledge gap" is more severe among older individuals because of generational change and it also significantly widens among lowly educated individuals compared to highly-educated ones. In a similar vein, although race appears to be a significant determinant of political knowledge, when a more appropriate operationalization of political knowledge that accounts for the issues most salient to disadvantaged groups is employed, race loses its explanatory power. For instance, as Abrajano (2015) demonstrates, blacks and Latinos score lower on conventional political knowledge items, compared to white respondents. On the other hand, these groups identify the ideological stances of parties and candidates as accurately as whites (Abrajano 2015). In a similar vein, when researchers measure respondents' knowledge about carceral violence, an important issue in US politics, black respondents tend to perform better than their white counterparts (Cohen and Luttig 2019).

Other individual-level determinants such as intelligence, political interest (Luskin 1990), occupation (Luskin 1990; Clark 2014) or age (Jennings 1996; Stockemer and Rocher 2017), appears to be closely associated with political knowledge. Another widely investigated individual-level determinant of political knowledge is the patterns of media consumption. Several studies confirm the argument that exposure to news media is significantly and positively associated with political knowledge (Couldry, Livingstone, and Markham 2010; DellaVigna and Kaplan 2007; Elo and Rapeli 2010; Eveland and Scheufelle 2000; Schroeder and Stone 2015). There is also a line of research that seeks to address the nuanced nature of the impact of news media exposure on political knowledge. For instance, frequency of political contents in news outlets (de Vreese and Boomgaarden 2006) and the public/private ownership of the outlets (Holtz-Bacha and Norris 2001) that individuals follow influence the impact of news media consumption. Moreover, newspaper consumption appears to be a more significant predictor of relatively high levels of political knowledge compared to TV or Internet news (Deli Carpini and Keeter 1996; Elo and Rapeli 2010; Fraile 2011; Fraile and Iyengar 2014; Jerit, Barabas, and Bolsen 2006; Prior 2005).

In addition to the individual-level determinants of political knowledge, scholars of political

knowledge have investigated the impact of several country-level contextual determinants. These factors have a substantial impact on the levels and distribution of political knowledge since they alter the costs associated with gathering political knowledge or provide additional incentives for citizens to seek this knowledge (Berggren 2001; Gordon and Segura 1997). In one of the earliest works on contextual determinants of political knowledge, Gordon and Segura (1997) demonstrate that electoral system, party system, and electoral timing significantly influence the political knowledge of citizens. More specifically, multiparty systems promote enhanced levels of political knowledge. However, once the effective number of parties exceeds a certain threshold, this effect disappears and even turns negative. Furthermore, higher disproportionality of an electoral system results in a lower motivation for gathering political knowledge (Gordon and Segura 1997), and the effect of the time passed since the last election on political knowledge is negative (Andersen, Tilley and Heath 2005; Berggren 2001; Gordon and Segura 1997; Nicholson 2003). In line with the party system factors, increasing levels of ideological differences between parties and the polarization of the party systems are positively associated with political knowledge (Fortunato, Stevenson and Vonnahme 2014; Vegetti, Fazekas and Méder 2017). Additionally, the enforcement of compulsory voting (Berggren 2001; Sheppard 2015), as well as the degree of unicameralism (Berggren 2001; Gordon and Segura 1997) produce additional motivation for gathering political knowledge, resulting in higher levels of political knowledge of citizens.

Media environments have received substantial attention in the political knowledge literature as they are closely associated with the availability of political information in Luskin's (1990) framework. Many citizens rely on the information that they receive from media outlets, and the media's decisions regarding what to cover and how to cover certain issues have a significant effect on citizens' levels of political knowledge (Gerber, Karlan and Bergan 2009). In line with this, the differences in contexts and environments that media outlets operate in produce a great amount of variance in political knowledge levels. One of the most important contextual determinants regarding the media environments is unsurprisingly media freedom. Citizens who reside in countries where government interference with the media outlets is limited demonstrate higher levels of political knowledge compared to their counterparts in countries where governments frequently interfere with media outlets (Leeson 2008; Jerit, Barabas, and Bolsen 2006; Schoonvelde 2014). On top of media freedom, the scope of the news that media outlets cover has a well-documented effect on political knowledge. This line of research demonstrates that in countries where the media provide a wide range of political news, the average political knowledge is higher and the discrepancy between the citizens with high and low levels of socioeconomic resources is lower compared to countries where there is a paucity of adequate political information (Barabas and Jerit 2009; Fraile 2013; Nicholson 2003; Schroeder and Stone 2015). "The volume, breadth, and prominence of news media coverage" (Barabas and Jerit 2009, 73) not only increase the average levels of political knowledge; but they also influence the effects of several individual factors, such as income and race.

Recent technological developments in communication have produced media environments with abundant supplies of political information and significant increases in the number of media outlets. On the other hand, the average levels of political knowledge have remained stagnant across many societies (Prior 2005). To explain this almost contradictory outcome, scholars have underscored the increasing prominence of media outlets that focus on entertainment. Prior (2005) argues that due to this prominence of entertainment networks, individuals who are mostly apathetic towards the political discussions have abandoned following the news, leading to lower levels of political knowledge. Similarly, Iyengar and his colleagues (2010) demonstrate that media outlets that operate within "public-service oriented" environments provide "hard-news" more frequently compared to their counterparts operating within "market-based" environments, resulting in narrower knowledge gaps in the former environments. Similarly, in countries where media environments are more public-service oriented, citizens exhibit higher levels of political knowledge and knowledge is more evenly distributed compared to countries where media environments are "entertainment-centered" and "market-driven" (Curran et al. 2009).

2.3 Theory

The literature provides strong empirical support for the positive impact of media freedom on political knowledge (Fraile 2013; Leeson 2008; Schoonvelde 2014). In short, citizens' average level of political knowledge is expected to be higher in countries where media outlets are free from government interference. In countries where governments often interfere with media, the availability of political information, in Luskin's (1990) framework, decreases immensely. When available political information is scarce, even those who have the socioeconomic resources to acquire high levels of political knowledge might fail to do so. Moreover, if the media outlets are under the close supervision of governments, the issues they can cover remains limited, further suppressing the availability of political information. Governments that keep the media environments under close supervision limit the availability of accurate information regarding the policy stances or ideologies of opposition parties and candidates to undermine the appeals of these actors. Consequently, media environments that operate under the close supervision of governments generally fail to provide accurate information about the opposition to provide electoral advantage to the incumbents, or avoid repercussions from them. Therefore, I expect media bias, in terms of the coverage of opposition parties and candidates, to be negatively associated with citizens' political knowledge in terms of the policy stances of political parties.

H_1: In countries where media bias in terms of the coverage of opposition parties and candidates is higher, the average level of political knowledge is lower.

I expect electoral proximity to also have a substantial effect on political knowledge. There is a vast amount of empirical evidence suggesting that right after an election, individuals exhibit their highest levels of political knowledge and this knowledge decreases over the remainder of the electoral cycle (Andersen, Tilley, and Heath 2005; Berggren 2001; Gordon and Segura 1997; Nicholson 2003). The underlying mechanism behind this effect is straightforward: as the elections become imminent, the inflow of political information drastically increases to inform the public even in countries where media bias against the opposition is prevalent. A major problem of the existing literature is that, to the best of my knowledge, there are no studies investigating the non-linear nature of the effect of electoral proximity on political knowledge. Most studies investigate only the effect of the number of years passed after an election (Andersen, Tilley, and Heath 2005; Berggren 2001; Gordon and Segura 1997) or the effect of the number of days before an election (Nicholson 2003).

As the media provide vast amounts of political information right before elections, citizens' exposure to political news should immensely increase (Abney et al. 2013; Andersen, Tilley, and Heath 2005; Michelitch and Utych 2018), and this should result in higher levels of political knowledge during the campaign period. I also expect citizens to continue to exhibit this increased level of political knowledge briefly after the elections. As the media's attention to politics diminishes over the course of the electoral cycle, the increase in citizens' political knowledge disappears.

H_2: Electoral proximity has a significant and non-linear effect on political knowledge, such that, as the elections are imminent, the average level of political knowledge increases; and this increase disappears over the course of the electoral cycle.

Although scholars have investigated the effects of media freedom and electoral proximity on political knowledge, to this date, the interactive relationship between media freedom and electoral proximity is not studied. In this chapter, I seek to fill out this gap in the literature by suggesting the following theoretical framework: the effect of electoral proximity on political knowledge is contingent on media freedom. To put it simply, I expect the average knowledge in terms of party stances to severely fluctuate and follow a U-shaped curve over the electoral cycle in countries where media bias against the opposition is prevalent. On the other hand, in countries where media outlets cover the policies and ideological stances of opposition parties and candidates without any bias, I expect the average political knowledge to marginally fluctuate or stay almost constant over the electoral cycle.

H_3: The effect of electoral proximity on political knowledge is conditional on media bias against opposition such that countries with high levels of media bias against the opposition exhibit more severe fluctuations in political knowledge over the electoral cycle.

2.4 Research Design

The data for this chapter are drawn from six modules (1994, 1999, 2004, 2009, 2014, and 2019) of the European Election Studies. Although EES data contain information only on European countries, they provide a unique opportunity to investigate the interactive effects of electoral proximity and media freedom on political knowledge. The studies are conducted following the European Parliamentary elections which are held every five years. This allows researchers to investigate fluctuations in political knowledge over the national electoral cycles. To put it simply, countries tend to be at different stages of their electoral cycles in each module and there is considerable cross-sectional variance of the electoral cycles within each module. Furthermore, despite its limited regional focus, the EES data exhibit significant country-level variance in terms of media freedom, and individual-level variance in terms of political knowledge as the summary statistics in appendices show.

2.4.1 Dependent Variable

EES modules contain varying numbers of questions measuring respondents' ability to correctly recall information regarding different aspects of domestic and European politics, such as the EU member states, the outcome of the previous European Parliament elections, or the name of a national minister. Although the questions are standardized across countries in each module, they are not standardized across modules. In other words, the domain and difficulty of political knowledge questions differ across modules, and this makes investigating the cross-temporal determinants of political knowledge at the contextual and individual level a challenging task.

To construct a measure of political knowledge that is standardized within countries and modules, this study employs respondents' ability to correctly place political parties on a left-right ideological spectrum as the dependent variable. All modules of the EES contain items that ask respondents to place national political parties on a left-right ideological spectrum. As Gordon and Segura (1997) argue, knowing the policy preferences of political representatives is an essential component of political knowledge as it is a prerequisite of the establishment of political accountability between citizens and policymakers. Furthermore, since the left-right ideological spectrum is salient for the majority of European democracies (Fortunato, Stevenson, and Vonnahme 2014), assessing respondents' ability to place political parties among this scale yields a valid measure of political knowledge.

There are two operationalizations of political knowledge in this chapter. First, I measure political knowledge as a respondent's average accuracy of locating party positions on the

ideological spectrum. Following Gordon and Segura (1997), the true position of a party is calculated as the mean of all valid placements that respondents provide in a given country in a given year. After calculating the true stances of political parties, I calculated the average distance between a respondent's placements of political parties and these parties' respective true stances. If an individual fails to provide a valid placement for a political party, I penalized this missing response with a score of mean plus one standard deviation of the difference between the respondents' placements and the true stances of the corresponding political parties. After these operations, I reverse-coded the variable so that higher values would indicate higher accuracy in identifying party positions.

It might be argued that for instance, a one-point inaccuracy on an eleven-points scale might have disparate implications among different countries or time-periods. To construct a more conservative measurement of political knowledge that accounts for this issue, the *Alternative Political Knowledge* variable measures knowledge as respondents' ability to correctly sort the two largest national parties on an ideological spectrum. I collected data on election dates and outcomes from the *National Elections Across Democracy and Autocracy* (Hyde and Marinov 2012), and *Global Elections Databases* (Brancati 2020). For each country in each module, I identified the parliamentary elections that preceded the interviews and two political parties that received the most votes in these elections. Then, I calculated the true stances of these parties as explained above. The Alternative Political Knowledge variable scores 1 if the respondent's ordering of these two political parties are in line with their true stances. On the other hand, the variable scores 0 if the respondent provides an incorrect sorting or fails to place at least one of the parties.

2.4.2 Independent Variables

The main explanatory variables are electoral proximity and media freedom. I measured electoral proximity in two ways. Using *National Elections Across Democracy and Autocracy* (Hyde and Marinov 2012), and *Global Elections Databases* (Brancati 2020), I calculated the distances between EES' interview dates (which are coded in each module for each respondent) and the dates of previous and following elections.[2]For the first measurement of electoral proximity, I calculated the number of months passed since the last general election by dividing the number of days between the interview date and the previous national election by 30. For the second measure, I calculated the ratio of the days passed since the previous general election to the electoral cycle (measured as the number of days between the two successive elections) of each country. Consequently, while the first measure ranges between 0 and 52 months, the second measure lies within 0 and 1. The summary statistics for these two measures are provided in appendices.

[2]In countries where elections are held in two rounds, I used the date of the second round.

As discussed above, the second key explanatory variable is media freedom. Media freedom data for this study originate from the variable on "Media Bias" in V-Dem Dataset – Version 10 (Coppedge et al. 2020). This variable contains country expert assessments on the level of "media bias against opposition parties or candidates" and whether media outlets cover incumbent and opposition parties impartially (Coppedge et al. 2020, 190). Although the variable is originally ordinal, the researchers convert it into interval following their measurement model.[3] This item provides a great opportunity to investigate the media's influence on political knowledge as it directly assesses the level of information that media outlets provide regarding the policies and stances of political parties. The variable ranges between -.02 (Hungary in 2019) and 2.9 (Denmark between 1994 and 2009). Lower values indicate higher coverage bias– i.e., where opposition parties or candidates have no media coverage, whereas higher values indicate media outlets' impartiality in terms of their coverage of opposition parties and candidates. At one end of this range are mainly the Eastern Europen countries, such as Hungary, Romania, and Bulgaria; and at the other end lie more established democracies such as Denmark, Germany, and France.

Furthermore, I measured respondents' levels of media consumption by employing two question batteries. The first battery asks respondents their frequency of following news regarding the European Parliament Elections on TV, newspapers, and Web. The second battery asks respondents their frequency of following news on TV and newspapers. Unfortunately, the 1994 and 2019 modules of EES do not contain these questions. Moreover, the responses to the second battery of questions are not standardized across modules; thus, I generate standardized variables from these items measuring frequencies of TV-news and newspaper consumptions. I also introduce two sets of control variables. The first one is concerned with demographics, such as gender, age, education, and urban/rural residence; while the second one is concerned with socio-political attributes, such as ideology, political interest, subjective social class, and turnout in the previous election. The *Education* variable scores 1 if respondents were at most 15 years old when they stopped formal education, scores 2 if respondents were between 16 and 19 when they stopped formal education, and scores 3 if the individuals were pursuing formal education after the age of 19. The *Residency* variable scores 1 for individuals who reside in rural parts, 2 for individuals who reside in small towns, and 3 for individuals who reside in cities or suburbs of large cities.

Additionally, to control for the effect of time, I introduce year as a control variable. It might be argued that the age of democracy has a positive impact on political knowledge, since political parties would be more established and voters would have more time to gather information about these parties in countries with longer democratic experiences. To account for this, I introduce *Age of Democracy* as a control variable. I include a final control variable only in models where *Alternative Political Knowledge* is the dependent variable, which measures the absolute distance between the true stances of two largest political parties to account for varying difficulties of sorting these parties across countries

[3]For a detailed discussion of their model see: (Pemstein et al. 2020).

and time.

2.5 Empirical Analyses and Findings

Table 1 presents the OLS regression estimates on the average accuracy of placing political parties on the left-right ideological spectrum. The models in Table 1 contain all modules of the EES except for the 1989 module, and the effective sample size is 93.875. In the additive model, the effect of months passed since the previous parliamentary elections appears to be positive and statistically distinguishable from zero. However, when the squared proximity variable and the interaction terms are introduced, the sign of the coefficient associated with temporal proximity changes. The coefficients associated with the squared temporal proximity appear to have the reverse sign of the coefficients associated with *Months Since Last Election* and these coefficients are jointly distinguishable from zero, which provides empirical support for the non-linear nature of the relationship between temporal proximity and political knowledge.

Furthermore, the coefficients associated with *Media Bias* are statistically distinguishable from zero at 99% confidence level in all models except Model 3, and its effect is in the expected direction in all models. The significance of the coefficients associated with the interaction of *Months Since Last Election* and *Media Freedom* in Models 2 and 3, as well as the coefficient associated with the interaction of the squared temporal proximity and *Media Bias* in Model 3 provides empirical support for the existence of a conditional relationship between temporal distance and *Media Bias* in terms of their interactive effects on *Political Knowledge*. Finally, a joint-significance test for the squared temporal distance variable and the interaction terms reveals that the introduction of these variables significantly enhances the explanatory power of the models at 99% confidence level.

According to the base additive model in Table 1, holding all other variables constant, a unit increase, which accounts for almost two standard deviations of the variable, in *Media Bias* results in a .16 point increase in the average accuracy of respondents in placing political parties on the ideological spectrum. The additive model also suggests that holding other variables constant, each year passed after general elections increases the dependent variable by .02. On the other hand, when the interaction terms are introduced in the models, the effect of temporal proximity changes sign as Figure 1 demonstrates.

Figure 1 depicts respondents' predicted average accuracy of identifying the ideological stances of national parties over the electoral cycle in countries with differing levels of media biases. The blue line represents countries where *Media Bias* is at the 10^{th} percentile of its distribution, the red line represents countries where the variable is at its mean, and the

green line represents countries where the variable is at the 90^{th} percentile of its distribution.

Table 2.1 OLS Regression Estimates on the Average Accuracy of Identifying Party Positions

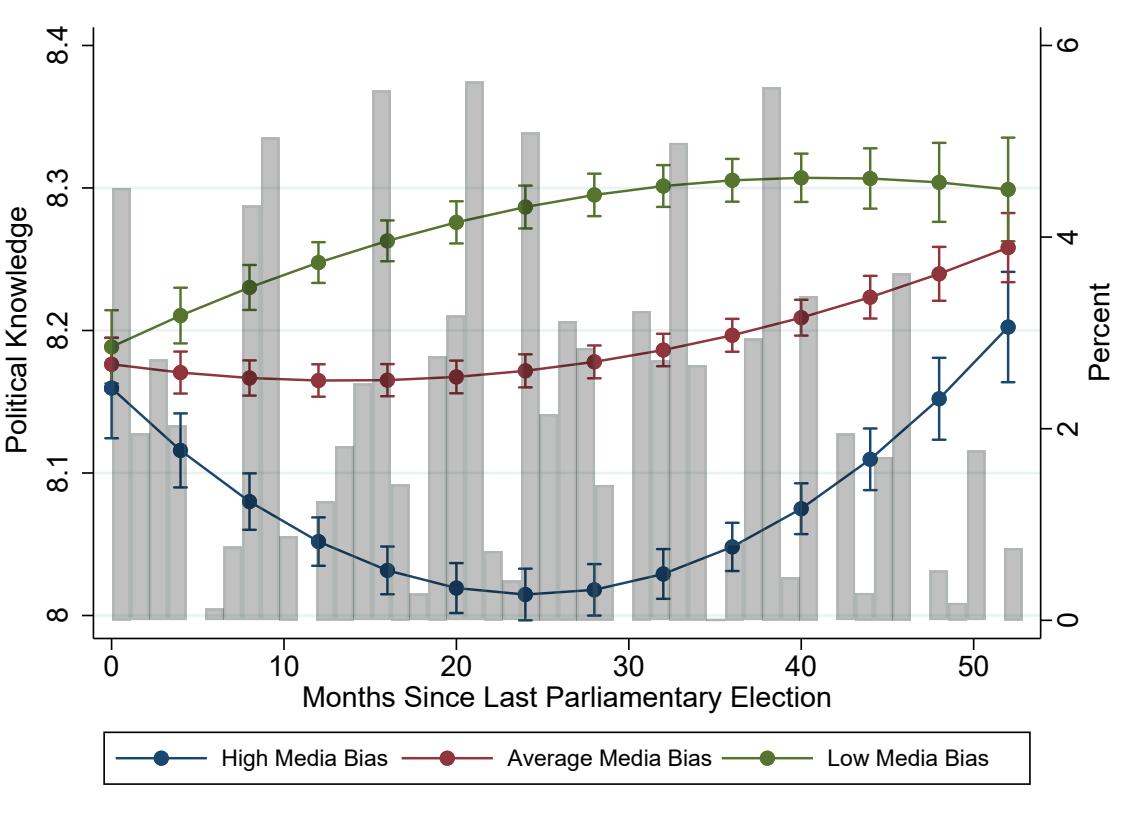
	Additive M.	Model.1	Model.2	Model.3
Months Since Last Election	0.0016***	-0.0010	-0.0043***	-0.0284***
	(0.0002)	(0.0008)	(0.0012)	(0.0036)
$MSLE^2$		0.0001***	0.0001***	0.0005***
		(0.0000)	(0.0000)	(0.0001)
Media Bias	0.1573***	0.1578***	0.1240***	0.0216
	(0.0064)	(0.0064)	(0.0118)	(0.0182)
Months Since Last Election × Media Bias			0.0015***	0.0132***
			(0.0004)	(0.0017)
$MSLE^2$ × Media Bias				-0.0002***
				(0.0000)
Age of Democracy	-0.0009***	-0.0009***	-0.0010***	-0.0009***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Education	0.0789***	0.0792***	0.0797***	0.0791***
	(0.0048)	(0.0048)	(0.0048)	(0.0048)
Female	-0.0777***	-0.0777***	-0.0775***	-0.0782***
	(0.0060)	(0.0060)	(0.0060)	(0.0060)
Age	0.0001	0.0001	0.0001	0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)
Ideology	-0.0130***	-0.0130***	-0.0131***	-0.0134***
	(0.0013)	(0.0013)	(0.0013)	(0.0013)
Social Class	0.1014***	0.1015***	0.1012***	0.1023***
	(0.0046)	(0.0046)	(0.0046)	(0.0046)
Political Interest	0.0062*	0.0061	0.0063*	0.0060
	(0.0037)	(0.0037)	(0.0037)	(0.0037)
Residency	0.0176***	0.0175***	0.0177***	0.0161***
	(0.0037)	(0.0037)	(0.0037)	(0.0037)
Turnout	0.0584***	0.0584***	0.0588***	0.0601***
	(0.0093)	(0.0093)	(0.0093)	(0.0093)
Year	-0.0067***	-0.0067***	-0.0066***	-0.0066***
	(0.0004)	(0.0004)	(0.0004)	(0.0004)
Constant	20.9357***	21.1010***	20.9558***	21.1905***
	(0.8488)	(0.8485)	(0.8480)	(0.8499)
N	93875	93875	93875	93875
R^2	0.0295	0.0296	0.0298	0.0303

* p<0.10, ** p<0.05, *** p<0.01, two tailed tests.

Robust standard errors in parantheses.

Figure 1 suggests that right after an election, predicted average accuracies of respondents are indistinguishable from each other at 95% confidence level for the three levels of *Media Bias* described above. In each case, the average predicted accuracy is between 8.15 and

Figure 2.1 Linear Predictions of *Political Knowledge* as Conditional on *Months Since Last Election* and *Media Bias* - Based on Model.3 in Table 1



8.20. However, on average, 4 months after the elections, the differences between the predicted accuracies in countries with differing levels of *Media Bias* becomes statistically distinguishable from zero at 95% confidence level. Overall, Figure 1 provides evidence for the argument that, on average, *Political Knowledge* deteriorates over the electoral cycle and increases back when elections are imminent in countries where media outlets provide biased political information. On the other hand, in countries where media bias towards the opposition parties or candidates is relatively less pronounced, on average, the political knowledge levels of respondents almost steadily increase over the electoral cycle.

Furthermore, the effects of most control variables in Table 1 appear to be statistically distinguishable from zero at 95% confidence level. Education and perceived social class have positive effects on the average accuracy of identifying party stances. Table 1 also suggests that, on average, men are more accurate in their placements compared to women. The negative coefficients of the ideology variable in Table 1 indicate that those who identify as leftists are more accurate in their placements compared to the rightists. Moreover, the accuracy of respondents increases as the size of the town they live in enlarges, and those who voted in the previous elections provide more accurate placements compared to those who abstained in the elections. Finally, contrary to prior expectations, although being positive, the effect of political interest on political knowledge is not statistically distinguishable from zero in none of the models in Table 1. Similarly, controlling for several

other individual and contextual factors, the effect of age remains insignificant. Although the effect of age of democracy on political knowledge is statistically distinguishable from zero at 99% confidence level, in contrast with prior expectations, its effect is negative.

Table 2.2 OLS Regression Estimates on the Average Accuracy of Identifying Party Positions with Media Consumption

	Model.1	Model.2	Model.3
Months Since Last Election	-0.0049	-0.0053	-0.0049
	(0.0045)	(0.0045)	(0.0045)
$MSLE^2$	0.0002**	0.0002**	0.0002**
	(0.0001)	(0.0001)	(0.0001)
Media Bias	0.1532***	0.1483***	0.1505***
	(0.0220)	(0.0220)	(0.0219)
Months Since Last Election × Media Bias	0.0045**	0.0047**	0.0045**
	(0.0021)	(0.0021)	(0.0021)
$MSLE^2$ × Media Bias	-0.0001***	-0.0001***	-0.0001***
	(0.0000)	(0.0000)	(0.0000)
Standardized TV News		-0.0103***	
		(0.0040)	
Standardized Newspapers		0.0162***	
		(0.0040)	
Follow EE (TV)			-0.0411***
			(0.0059)
Follow EE (Newsp.)			0.0226***
			(0.0057)
Follow EE (Web)			0.0015
			(0.0066)
Age of Democracy	-0.0007***	-0.0007***	-0.0008***
	(0.0001)	(0.0001)	(0.0001)
Education	0.0741***	0.0717***	0.0719***
	(0.0058)	(0.0058)	(0.0058)
Female	-0.0768***	-0.0747***	-0.0755***
	(0.0072)	(0.0072)	(0.0072)
Age	-0.0016***	-0.0016***	-0.0014***
	(0.0002)	(0.0002)	(0.0002)
Ideology	-0.0082***	-0.0082***	-0.0079***
	(0.0016)	(0.0016)	(0.0016)
Social Class	0.0815***	0.0798***	0.0802***
	(0.0057)	(0.0057)	(0.0057)
Political Interest	0.0045	0.0033	0.0091*
	(0.0045)	(0.0046)	(0.0049)
Residency	0.0155***	0.0155***	0.0152***
	(0.0044)	(0.0044)	(0.0044)
Turnout	0.0746***	0.0736***	0.0765***
	(0.0110)	(0.0110)	(0.0111)
Year	0.0098***	0.0098***	0.0101***
	(0.0007)	(0.0007)	(0.0008)
Constant	-12.1461***	-12.0663***	-12.6242***
	(1.4608)	(1.4716)	(1.5818)
N	63130	63130	63130
R^2	0.0276	0.0279	0.0284

* p<0.10, ** p<0.05, *** p<0.01, two tailed tests.

Robust standard errors in parantheses.

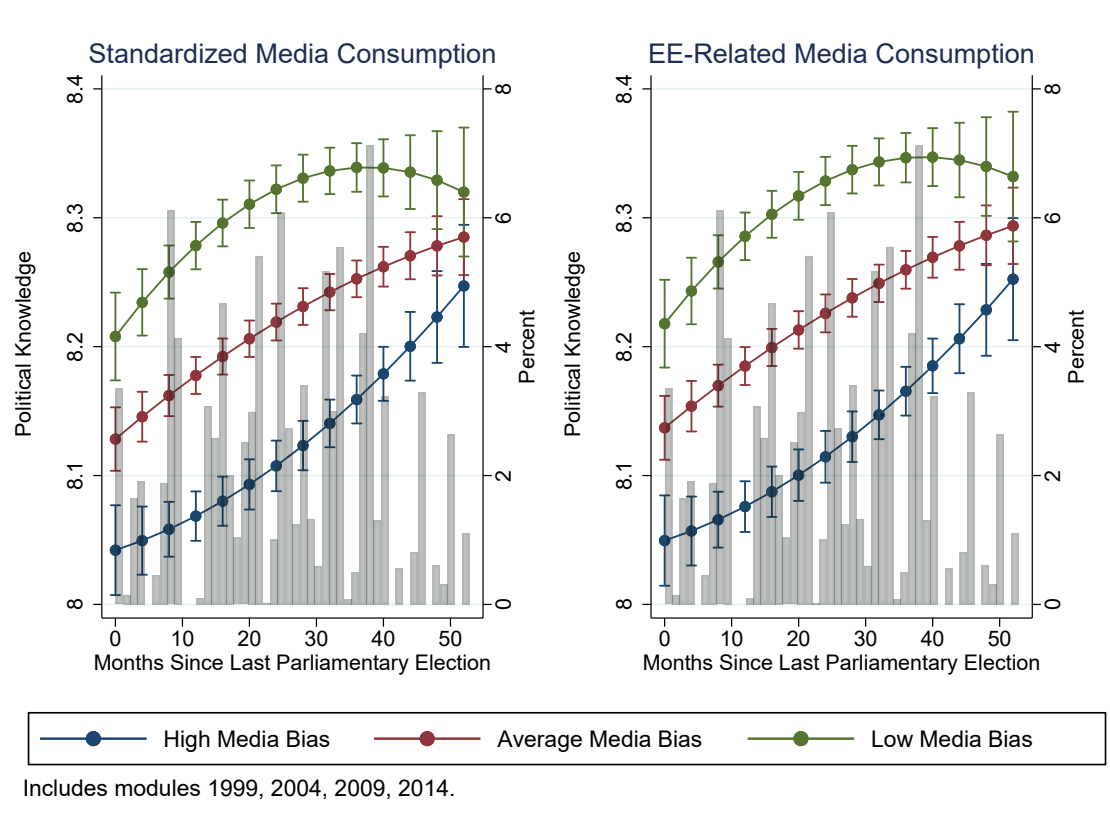
Models contain 1999, 2004, 2009 and 2014 modules.

As explained above, respondents' patterns of following news on printed media, TV, or the Internet should be associated with their levels of political knowledge. Although there is no standardized and straightforward question assessing respondents' media consumption frequencies in the EES, the frequency of following news on the European Parliamentary elections on different platforms and a standardized variable measuring news consumption would provide an appropriate proxy for this. Table 2 provides the OLS estimates on the average accuracy of placing political parties on the ideological spectrum with these two sets of media consumption variables. Since the 1994 and 2019 modules do not contain these sets of questions, they are dropped from the effective sample in Table 2. Consequently, the number of observations declines to 63.130. A joint significance test reveals that the introduction of media consumption variables significantly increases the explanatory power of Model 2 and Model 3 compared to Model 1. The coefficient estimates associated with the key explanatory variables, as well as the control variables appear to be unaffected by the introduction of media consumption variables.

Surprisingly, both Model 2 and Model 3 suggest that the frequency of following news on TV is negatively associated with the average accuracy of identifying party positions, and this effect is statistically distinguishable from zero at 99% confidence level in both models. However, the effects of media consumption variables appear to be negligible. For instance, a unit of increase of standardized TV news consumption results in a .01 reduction in the average accuracy of party placements. Model 3 indicates that the average accuracy of those who stated they "sometimes" followed news about European Parliament elections on TV is .04 lower than the accuracy of those who stated they "never" followed these news on TV. On the other hand, the effect of frequency of reading newspapers is positively associated with the accuracy of party placements, and this effect is statistically distinguishable from zero at 99% confidence level in both models. That is, a unit of increase in standardized newspaper consumption increases the average accuracy of respondents by .02. Similarly, those who report "sometimes" reading news about the European Parliament elections are on average .02 more accurate in their placements compared to those who "never" read these news.

Accounting for respondents' media consumption frequencies, Figure 2 plots the predicted average accuracies of placing political parties on the ideological spectrum. Figure 2 reveals that introducing the standardized media consumption variables or EE-related media consumption variables produces quite similar outcomes. Three important patterns differentiate Figure 2 from Figure 1. First, in Figure 1, right after an election the predicted average accuracies are not statistically distinguishable from each other; whereas, in Figure 2 *Media Bias* has a significant and positive effect on the predictions right after an election. Secondly, the predicted average accuracies for cases where the *Media Bias* is at its 10^{th} percentile do not follow a U-shaped curve as in Figure 1. On the contrary, the predicted values steadily increase over the electoral cycle. Finally, the predicted values begin from a significantly higher value in Figure 2 compared to Figure 1 for countries where *Media*

Figure 2.2 Linear Predictions of *Political Knowledge* as Conditional on *Months Since Last Election* and *Media Bias* Controlling for Media Consumption Variables - Based on Models 2 & 3 in Table 2



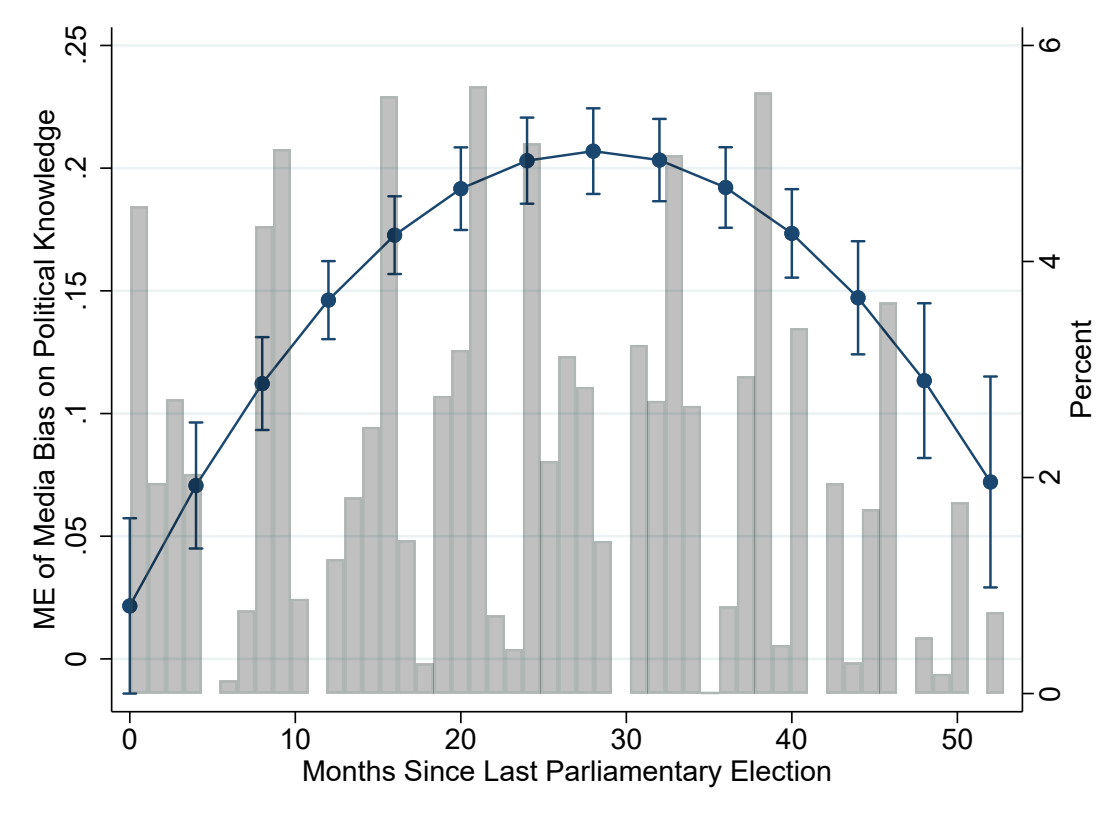
Bias is at its 90th percentile. On the other hand, the predicted values start at significantly lower values for the other two cases.

It is important to note that the reason behind these three patterns might simply be the exclusion of 1994 and 2019 modules.[4] Consequently, there is very little empirical evidence suggesting that the underlying reason behind the different patterns in Figure 1 and Figure 2 is the introduction of media consumption variables rather than the availability of 1994 and 2019 modules.

Figure 3 depicts the average marginal effects of *Media Bias* on the linear predictions based on Model 3 in Table 1. As expected, the average marginal effect of *Media Bias* is indistinguishable from zero right after a parliamentary election. However, over the electoral cycle it steadily increases and reaches a maximum value of .2 approximately 30 months after the previous election. From that point on, the effect starts to decrease and reaches .07 52 months after the election and it is barely distinguishable from zero at 95% confidence interval. Overall, Figure 3 provides empirical support for the argument that in countries where the media outlets provide news about political parties without any bias

[4]When the same model in Figure 1 is ran without the 1994 and 2019 modules, a similar pattern to Figure 2 emerges. The figure is available in the Appendix.

Figure 2.3 Average Marginal Effects of *Media Bias* as Conditional on *Months Since the Last Election* - Based on Model 3 in Table 1



in their coverage, the respondents' average accuracy of identifying the ideological stances of parties is significantly higher than respondents' who reside in countries with biased media outlets. However, this difference in accuracies disappears right after or before parliamentary elections. During the intense campaign periods, respondents who receive information from biased media outlets are as accurate as their counterparts who reside in countries with relatively free media environments.

To account for the differences in the number of political parties that respondents were asked to replace, as well as the varying levels of difficulty of placing these parties, the *Alternative Political Knowledge* variable measures whether a respondent could accurately sort the two parties which received the most votes in the previous parliamentary elections. Table 3 presents the logistic regression estimates on correctly ordering the two largest political parties. To assess the effect of temporal distance to previous/next elections, the models in Table 3 contain the *Proximity* variable which scores between 0 and 1, as explained above. Table 3 contains all EES modules between 1994 and 2019. A series of likelihood-ratio tests reveal that Model 3 provides a better fit to the data than the other three models. Consequently, from this point on, I will employ Model 3 as the base model.

Model 3 provides empirical evidence for the non-linear effect of electoral proximity on the dependent variable. The coefficients associated with *Media Bias* and the interaction term

Table 2.3 Logistic Regression Estimates on Correctly Ordering Two Largest Parties

	Additive M.	Model.1	Model.2	Model.3
Proximity	0.1027***	-0.3159**	-0.1226	2.6605***
	(0.0335)	(0.1276)	(0.2003)	(0.5846)
Proximity^2		0.4297***	0.3912***	-2.1509***
		(0.1263)	(0.1300)	(0.5199)
Media Bias	0.1627***	0.1629***	0.1984***	0.4498***
	(0.0194)	(0.0195)	(0.0344)	(0.0600)
Proximity × Media Bias			-0.0776	-1.4004***
			(0.0621)	(0.2692)
Proximity^2 × Media Bias				1.2218***
				(0.2426)
Party Distance	0.5457***	0.5446***	0.5444***	0.5472***
	(0.0076)	(0.0076)	(0.0076)	(0.0076)
Age of Democracy	-0.0006**	-0.0007***	-0.0007***	-0.0007**
	(0.0003)	(0.0003)	(0.0003)	(0.0003)
Education	0.2186***	0.2186***	0.2182***	0.2191***
	(0.0151)	(0.0151)	(0.0151)	(0.0151)
Female	-0.1095***	-0.1094***	-0.1097***	-0.1087***
	(0.0194)	(0.0194)	(0.0194)	(0.0194)
Age	0.0093***	0.0093***	0.0093***	0.0093***
	(0.0006)	(0.0006)	(0.0006)	(0.0006)
Ideology	-0.0091**	-0.0093**	-0.0092**	-0.0086**
	(0.0037)	(0.0037)	(0.0037)	(0.0037)
Subjective Social Class	0.1352***	0.1355***	0.1360***	0.1325***
	(0.0146)	(0.0146)	(0.0146)	(0.0146)
Political Interest	0.2121***	0.2110***	0.2107***	0.2113***
	(0.0116)	(0.0116)	(0.0116)	(0.0116)
Residency	0.0328***	0.0332***	0.0330***	0.0356***
	(0.0121)	(0.0121)	(0.0121)	(0.0121)
Turnout	0.3568***	0.3548***	0.3550***	0.3549***
	(0.0268)	(0.0268)	(0.0268)	(0.0268)
Year	-0.0223***	-0.0225***	-0.0227***	-0.0232***
	(0.0013)	(0.0013)	(0.0013)	(0.0014)
Constant	42.1722***	42.6658***	42.9396***	43.3427***
	(2.6912)	(2.6981)	(2.7073)	(2.7132)
N	72245	72245	72245	72245
Log-Likelihood	-33913.15	-33907.35	-33906.57	-33894.04
AIC	67854.30	67844.69	67845.13	67822.09
BIC	67982.93	67982.51	67992.14	67978.28

Standard errors in parentheses.

* p<0.1, ** p<0.05, *** p<0.01, two tailed tests.

consisting of *Media Bias* and *Proximity* indicates the existence of a conditionality in the effects of these variables on the dependent variable. Furthermore, the control variables,

except for age and political interest, have similar effects as they do in Table 1. While the coefficient estimates associated with age and political interest were not distinguishable from zero in Table 1, they are significantly and positively associated with the dependent variable at 99% confidence level in all models in Table 3. The coefficients associated with the *Party Distance* variable suggests that as the ideological distance between the two most popular parties increases, the probability that a respondent would accurately sort these parties also increases.

Figure 2.4 Predicted Probabilities of Correct Placement as Conditional on *Proximity* and *Media Bias*

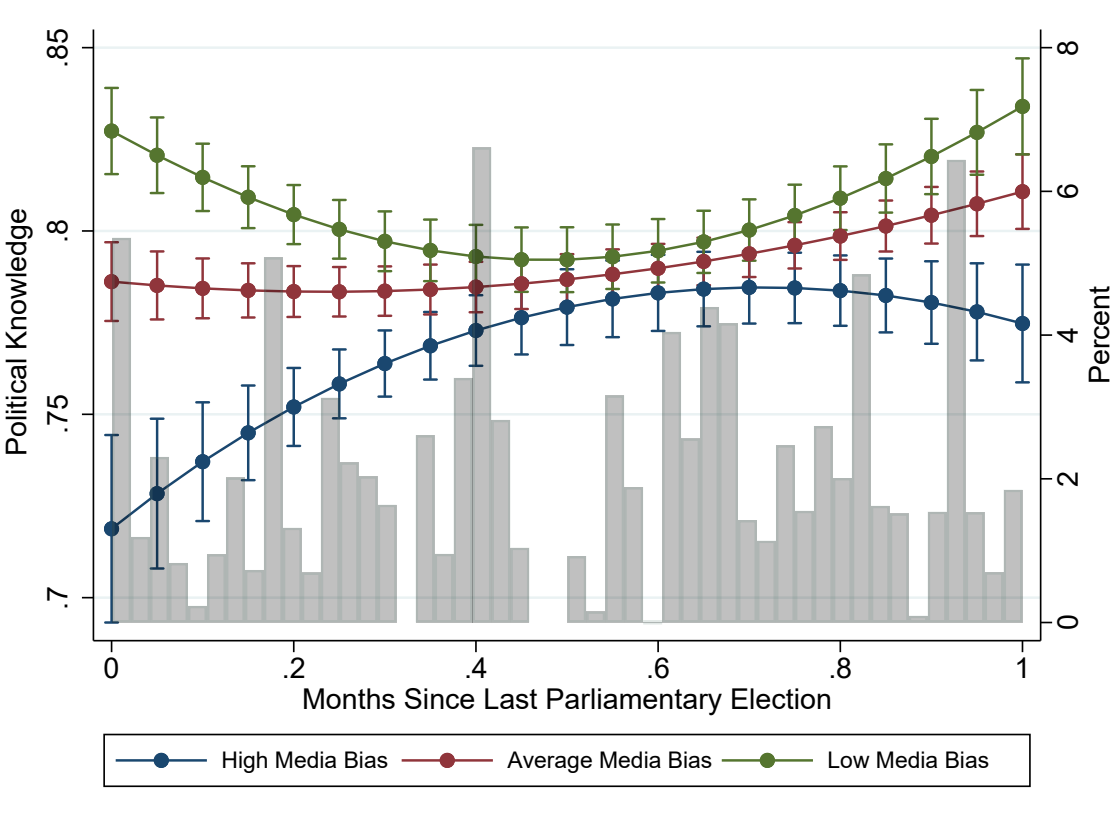


Figure 4 plots the predicted probabilities of correct placement as conditional on *Proximity* and *Media Bias*. The figure suggests that in cases where *Media Bias* is at its 90th percentile, the probability of correct ordering decreases steadily to .79 until the midpoint of the electoral cycle, then raises back to above .83. Whereas, in cases where *Media Bias* is at its mean, the probability of correct placement almost steadily increases over the electoral cycle, ranging between .78 to .81. In cases where *Media Bias* is at its 10th percentile, a quite different pattern emerges through the electoral cycle. In these cases, the probability of correct ordering sharply increases from .72 to .78 during the first seven tenths of the electoral cycle. From this point on, the probability decreases slightly to .77. Figure 4 also suggests that when *Proximity* scores between .3 and .8, the predicted probabilities with differing levels of *Media Bias* are indistinguishable from each other at 95% confidence level. Cases where *Media Bias* is at its 10th percentile and 90th percentile are distinguishable

from each other only after 80% of the electoral cycle is completed. On the other hand, predicted probabilities for cases where Media Bias is at its mean and its 90th percentile are not distinguishable from each other even at the end of the electoral cycle. The predicted probabilities are distinguishable from each other for cases where *Media Bias* is at its mean and 10th percentile only after 85% of the electoral cycle is completed.

Figure 2.5 Average Marginal Effects of *Media Bias* on *Alternative Political Knowledge* as Conditional on *Proximity*

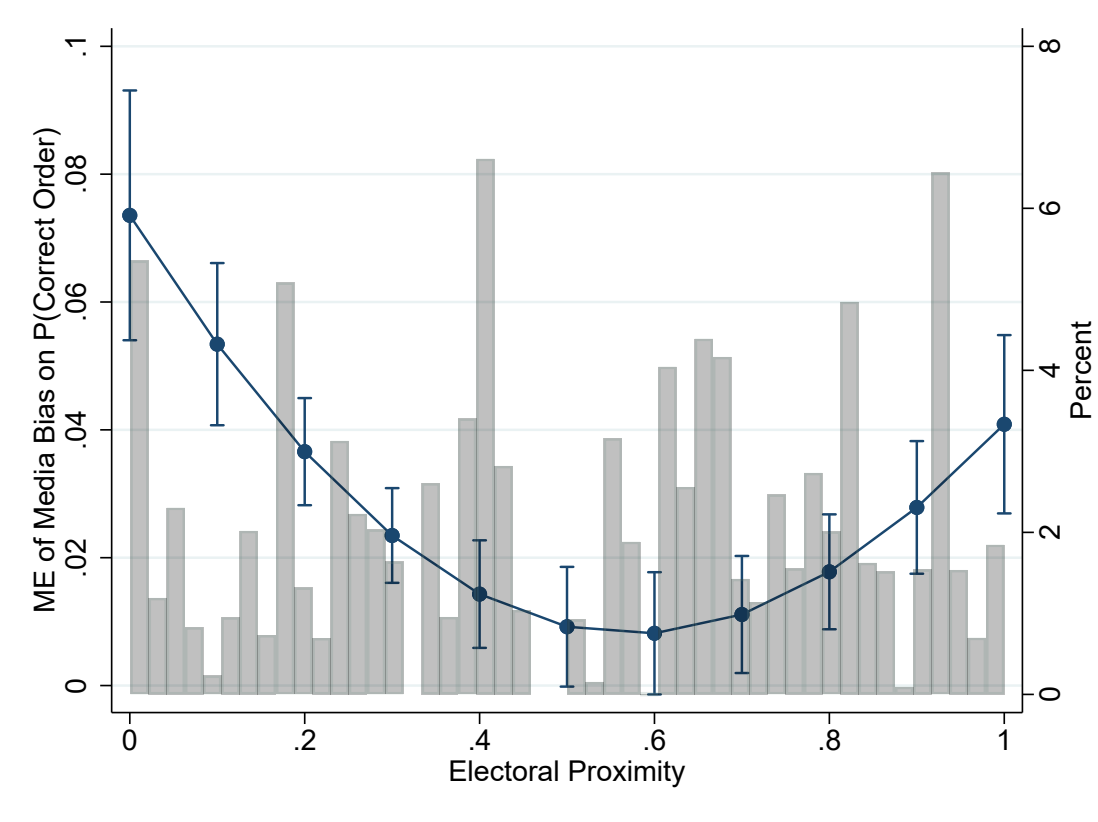


Figure 5 depicts the average marginal effects of *Media Bias* on the probability of correct ordering, as conditional on *Proximity*. At the beginning of the electoral cycle, a unit increase in *Media Bias*, on average, results in a .08 increase in the probability of correctly sorting the two largest political parties. Later on, this marginal effect decreases and at around the mid-point of the electoral cycle the effect is statistically indistinguishable from zero at 95% confidence level. From that point on, the marginal effect of *Media Bias* starts to increase and reaches statistical significance when around 70% of the electoral cycle is completed. By the end of the electoral cycle, a unit increase in *Media Bias* leads to a .04 increase in the probability of correct ordering, holding all other variables constant.

2.6 Discussion

The analyses in the previous section offer strong empirical support for the effects of media bias against opposition and electoral proximity on political knowledge. Furthermore, the findings also suggest that the effect of electoral proximity on political knowledge is conditional on media bias against the opposition. In short, while the average accuracy of identifying ideological stances of political parties fluctuates over the course of the electoral cycle more severely in countries where media bias against the opposition is pronounced, this accuracy remains almost constant in the remainder of the cases. It is also important to note that while the average accuracy tends to decrease in countries where media bias is relatively prevalent; it remains almost constant, if not increase, in other cases over the course of electoral cycle.

Due to data availability issues, the analyses in this chapter are limited to Europe. Since the majority of the European countries are established democracies and almost all of them have quite some experience with democratic regimes, the variances in terms of political knowledge and media bias are limited, as well. This limited variance only makes us reach more conservative estimates which makes us believe that a comparative analysis on a global scale would demonstrate that the effects of media bias and electoral proximity, as well as their interactive effect, are more substantial than what is demonstrated in this chapter. It would be particularly interesting to test the hypotheses of this chapter in a larger sample also consisting of the transitioning or emerging democracies.

Furthermore, the empirical analyses in this chapter are limited in their ability to explain individual-level variance. Introducing a more nuanced measure of media consumption behavior would enhance the explanatory power of the empirical models. The measures of media consumption in this chapter serve only as a proxy for media consumption patterns. In addition, accounting for the political contents and scope of coverage of individuals' preferred source of news would enhance the validity of the conclusions of this chapter. In this study, I was only able to account for individuals' frequency of following news in distinct platforms; however, media outlets differ immensely in terms of their coverage of political issues and ideological stances. Consequently, respondents' preferred media outlet would have a significant impact on their knowledge about certain parties and policies.

Lastly, this chapter investigates only a single aspect of political knowledge, namely, the knowledge about ideological stances of political parties. Further studies should extend this analysis to different components of political knowledge, such as party positions on certain issues or knowledge about political institutions, and assess the validity of this chapter's empirical findings.

3. POLITICAL KNOWLEDGE IN TURKEY

3.1 Introduction

The previous chapter illustrates that citizens residing in countries with biased media environments, on average, exhibit lower levels of political knowledge and their knowledge is more prone to fluctuations over the electoral cycles compared to their counterparts who reside in countries where the media landscape is relatively free. At this point, an issue worth addressing is how individuals navigate and acquire political information in biased and polarized media environments. What accounts for the heterogeneity in terms of political knowledge in these countries? To answer these questions, this chapter aims to explore the determinants of political knowledge in Turkey, a country with a polarized and biased media environment (Yanatma 2018).

Turkey and its media environment have received substantial scholarly attention. Once considered an exemplary instance of democratization, the country has started to move towards competitive authoritarianism under the Justice and Development Party's (Adalet ve Kalkınma Partisi [AKP]) incumbency (Esen and Gümüşçü 2016; Yılmaz and Bashirov 2018). Today, Turkey ranks 154 out of 180 countries according to the World Press Freedom Index (2020) of Reporters without Borders. The polarized and fragmented nature of its media environment is well documented (Erdoğan and Sumerci 2018; Moral and Çarkoğlu 2018; Yıldırım, Baruh, and Çarkoğlu 2020). Owing to these, I believe Turkey serves as a suitable case study for understanding the dynamics of political knowledge under censored and biased media environments.

Although the Turkish media environment has always been subject to state interventions, the pressures on Turkish media have increased after the 1980s and 1990s. During these years, with the onset of economic liberalization in Turkey, the ownership structure of the Turkish media landscape had been drastically transformed (Christensen 2007; Kaya and Çakmur 2010; Yılmaz 2016; Yeşil 2014). With the "big capital" and large conglomerates entering the media market, the Turkish media landscape experienced a period of

swift commercialization (Christensen 2007; Yeşil 2018). This transformation gave rise to increasing concentration of ownership in the media sector, and the formation of new clientelistic networks between media conglomerates and the state. To put it simply, new media conglomerates utilized the media organizations to pursue their interests in other sectors of the economy, and receive favorable treatment from the government (Christensen 2007; Corke et al. 2014; Kaya and Çakmur 2010; Yeşil 2014; Yılmaz 2016). Unsurprisingly, under these circumstances, there has been very little room for journalistic autonomy.

Coupled with the Turkish state's strict control over the media landscape, these commercial pressures further exacerbated media freedom in Turkey. Many scholars illustrated that political parallelism has been a defining feature of the Turkish media environment (Bayram 2010; Çarkoğlu, Baruh, and Yıldırım 2014; Kaya and Çakmur 2010). By the same token, political actors have utilized their control over the media landscape to further their electoral interests. For instance, recent scholarship suggests that newspapers tend to cover AKP and its policies more frequently compared to the opposition parties, and the newspapers present AKP with more favorable tones throughout the election campaigns (Çarkoğlu, Baruh, and Yıldırım 2014). More importantly, over the years, newspapers have developed a more critical and negative tone towards the opposition parties, and the visibility and favorability of the incumbent party, AKP, in the newspapers have increased drastically (Yıldırım, Baruh, and Çarkoğlu 2020).

Although the transformation of the Turkish media landscape is well documented, its effects on political behavior have rarely been studied. Behrouzian and colleagues (2016) demonstrate that under these circumstances, Turkish voters who perceive a threat to media freedom turn to online sources as their primary source of information. Extending this finding, Andı, Aytaç, and Çarkoğlu (2019) illustrate that Turkish voters who follow news through online sources and social media exhibit higher levels of political knowledge compared to those who rely on conventional forms of media. Moral and Çarkoğlu (2018) offer further empirical support for the effect of newspaper consumption on political knowledge by demonstrating that only non-partisan information-seekers enhance their policy-specific knowledge by following newspapers.

This chapter contributes to the literature in two respects. First, as discussed above, the dynamics of political knowledge in Turkey are rarely studied (with the exceptions of: Andı, Aytaç and Çarkoğlu 2019; Moral and Çarkoğlu 2018). I seek to extend this literature by investigating the role of the ideological distance between voters and parties, and voters' predispositions towards political parties on the unequal distribution of political knowledge among the Turkish electorate. Secondly, although some examined the ideological polarization of the newspapers and its effect on political knowledge (Moral and Çarkoğlu 2018), I investigate the role of TV channel preferences in determining voters' political knowledge. Since the majority of the Turkish populace report relying on TV news as their primary source of information, I believe studying the relationship between TV channel preferences and political knowledge would offer a fruitful research agenda.

This chapter is organized as follows: in the next section, I will discuss the findings of prior research on the transformation of the Turkish media landscape, and how this transformation altered political knowledge in Turkey. I then provide a theoretical framework for the hypotheses in this chapter and elaborate on them. Then, I will present the empirical findings and discuss the extent that these findings support the conclusions of the previous section. Lastly, I will comment on these findings, discuss the limitations of this study, and suggest new frontiers of research for future studies.

3.2 Literature Review

As the previous chapter and literature demonstrates, media freedom and media bias have a substantial effect on citizens' levels of political knowledge (Iyengar et al. 2010; Leeson 2008; Jerit, Barabas, and Bolsen 2006; Schoonvelde 2014). To further explore the extent of this effect, this chapter investigates the determinants of political knowledge in Turkey, a context that demonstrates declining levels of media freedom and increasing levels of media polarization. Investigating Turkey would produce valuable insights on "how citizens navigate closed media environments" (Behrouzian et al. 2016 4345) and acquire political knowledge under these circumstances.

The transformation of the Turkish media landscape since the 1990s has attracted the attention of communication and political science scholars. Several studies have demonstrated that "political parallelism" has been an innate feature of the Turkish media landscape (Bayram 2010; Kaya and Çakmur 2010). On the other hand, scholars have also argued that the extent of the control of political agents over the media outlets has varied over time (Bayram 2010; Christensen 2007; Kaya and Çakmur 2010; Yılmaz 2016; Yeşil 2014; Yeşil 2018). A brief historical overlook at the transformation of the Turkish media landscape would be instrumental for our understanding of the media conjuncture in Turkey during the last two decades.

Scholars argue that the most significant transformation of the Turkish media landscape coincides with the economic liberalization period of the late 1980s and 1990s (Christensen 2007; Kaya and Çakmur 2010; Yeşil 2014; Yılmaz 2016). During this period, the ownership structure of the Turkish media landscape had undergone a rapid commercial transformation. The "big capital" and large conglomerates started to dominate the market at the expense of local, independent, and family-owned organizations (Yeşil 2014). This dominance transformed the Turkish media landscape in three ways: first, due to the increased dominance of conglomerates, the media environment experienced a period of commercialization which brought about a fierce competition between the media outlets to attract

more readers/viewers and increase their market shares. This, in turn, gave rise to the tabloidization of the news, and the media outlets started to favor sports, scandals, and entertainment over socio-political issues (Bek 2004; Christensen 2007; Kaya and Çakmur 2010).

Secondly, this fierce competition and commercialization paved the way for increased concentration of ownership in the Turkish media landscape (Christensen 2007; Kaya and Çakmur 2010). Lastly, new forms of clientelistic networks between the state and media conglomerates burgeoned during this period. To put it simply, the new media conglomerates utilized their media organizations to further their interests in other sectors and receive favorable treatments from the government (Christensen 2007; Corke et al. 2014; Kaya and Çakmur 2010; Yeşil 2014; Yılmaz 2016). In other words, since the ownership of media outlets is concentrated at the hands of a few media conglomerates whose interests often depend on the treatments they receive from the government, there has been very little room for criticisms towards the state and government in the Turkish media landscape (Yeşil 2014).

In addition to these commercial pressures on Turkish media outlets, the state has historically been involved with the media sector (Yeşil 2014; Yılmaz 2016). The legal framework provides the state with the necessary tools to intervene with the operations of the media outlets. Incumbents have taken advantage of certain provisions of the Penal Code and Anti-Terror Act, laws governing the media, and state institutions, such as the Radio and Television Supreme Council, to suppress the media freedom and grant privileges to those organizations who support them politically (Yeşil 2018). Scholars argue that AKP has managed to "instrumentalize the media" through prosecutions of journalists, arbitrary expropriations of media outlets, and censoring dissident voices (Çarkoğlu and Yavuz 2010; Yeşil 2018). Consequently, according to the World Press Freedom Index of Reporters without Borders (2020), Turkey ranks 154 out of 180 countries in 2020, and the media environment in Turkey is characterized by fragmentation, concentrated ownership, and polarization along partisan lines (Çarkoğlu and Yavuz 2010; Corke et al. 2014; Yılmaz 2016).

On top of tracking the historical transformation of the Turkish media landscape, scholars have sought to address the contextual determinants of increasing political parallelism and media polarization in Turkey. Bayram (2010) demonstrates that political parallelism in Turkish media becomes more prominent when the party system exhibits a high level of ideological polarization, when coalition governments are formed, or when individuals are more likely to vote in line with their social identities. Furthermore, during the 2000s, the electoral dominance of the AKP and the opposition's lack of unity paved the way for the consolidation of political parallelism (Çarkoğlu, Baruh, and Yıldırım 2014). In addition, political parallelism intensifies during election campaigns, and AKP, the dominant party, immensely benefits from this. To put it simply, newspapers cover AKP and its policies more frequently compared to the opposition parties, and the newspapers present AKP with

more favorable tones throughout the election campaigns (Çarkoğlu, Baruh, and Yıldırım 2014).

Yıldırım, Baruh, and Çarkoğlu (2020) show that since AKP had come to power, the number of newspapers that support the incumbent party has significantly increased. This increase, in turn, gave rise to a more frequent and favorable coverage of the AKP's policies and ideological stance. The authors also demonstrate that as Turkey moved towards competitive authoritarianism,[1] on average, the number of parties towards which newspapers adopt a negative tone has increased. Additionally, the visibility and favorability of AKP in the Turkish media environment tend to become more prominent as elections become imminent. Consequently, Yıldırım and colleagues (2020) conclude that the Turkish press fails to fulfill its role as the provider of a "level playing-field" even during the election campaigns.

As the previous chapter demonstrate, in countries with high levels of media bias, the masses' political knowledge substantially fluctuates. To address the dynamics of these fluctuations and explore the ways individuals acquire political information in fragmented and censored media environments, in this chapter, I investigate the individual determinants of political knowledge in Turkey, a country characterized by a highly polarized, fragmented, and biased media landscape (Çarkoğlu, Baruh, and Yıldırım 2014; Moral and Çarkoğlu 2018; Yanatma 2018; Yıldırım, Baruh, and Çarkoğlu 2020). Consequently, studying the individual determinants of political knowledge in Turkey would enhance our understanding of the variations in political knowledge in societies with similarly biased media environments.

Andı, Aytaç, and Çarkoğlu (2019) demonstrate that those who follow the news on the web exhibit higher levels of political knowledge. The authors conclude that due to the incumbent's strict control over conventional media environments, individuals who are closer to the opposition turn to online news sources and social media. In other words, those who follow the online news sources demonstrate higher levels of political knowledge, since these mediums are relatively less exposed to the incumbent's interventions (Andı, Aytaç and Çarkoğlu 2019). Behrouzian and her coauthors (2016) also provide empirical support for this conclusion by demonstrating that as an individual's perception of threat to media freedom increases, she tends to rely more on online sources for information in Turkey.

Extending the prior findings of the literature, Moral and Çarkoğlu (2018) demonstrate that the media landscape in Turkey is substantially polarized following the secular-conservative partisan lines and even the most widely read newspapers are prone to political bias. Although following newspapers has a significant and positive effect on identifying party policies and stances, the authors argue that this positive effect is contingent on individuals' partisan attitudes. In other words, those who seek information that conforms with

[1] For a discussion of competitive authoritarianism in Turkey, see: Esen and Gümüşçü 2016; Yılmaz and Bashirov 2018.

their pre-existing partisan leanings are prone to be misinformed. Following newspapers increase the policy-specific knowledge of only those who are non-partisans and actively seeking information (Moral and Çarkoğlu 2018).

3.3 Theory

As described above, the aim of this chapter is to investigate the dynamics and determinants of political knowledge in Turkey, a case characterized by a fragmented and polarized media environment (Çarkoğlu, Baruh, and Yıldırım 2014; Corke et al. 2014; Erdoğan and Semerci 2018; Yıldırım, Baruh, and Çarkoğlu 2020). Under these circumstances, I expect the extent of respondents' positive attitudes towards political parties, the level of affective polarization that respondents exhibit, and being a partisan of a certain party to have a strong effect on political knowledge in Turkey.

I argue that voters tend to know more about the parties they "like" compared to parties that they "dislike." There are two reasons for this expectation. First, voters tend to be more attentive to the news about the parties that they "like" and these parties' policy offerings. Second, to conform with their pre-existing dispositions towards particular parties, voters perceive the ideological stances and policy offerings of political parties that they "dislike" in an unrealistic manner (Busch 2016; Dahlberg 2013). In a similar vein, I expect voters who exhibit higher levels of affective polarization (strongly favoring one party over the others) to demonstrate lower levels of accuracy in identifying the ideological stances of political parties. Furthermore, following the same theoretical framework, I expect partisans of particular parties to be more accurate in their placements of parties on the ideological spectrum compared to non-partisans of that party.

H_{1A} : As Turkish voters' positive attitudes towards political parties increase, their accuracy of identifying the ideological stances of these parties increases.
H_{1B} : As Turkish voters' levels of affective polarization increase, their accuracy of identifying the ideological stances of political parties decreases.
H_{1C} : Partisans are more accurate in placing the party they identify with on an ideological spectrum compared to non-partisans.

On average, I expect voters to place political parties that are closer to their ideological positions more accurately. In other words, voters find it more challenging to identify the ideological stances of political parties if the parties are from an ideological family with which the voters are not familiar simply because they pay less attention to the policy

offerings of these parties to avoid "cognitive dissonance" (Busch 2016; Dahlberg 2013; Heider 1946).

On the other hand, I argue that as the ideological distance between respondents and political parties exceeds a certain threshold, respondents' accuracy of identifying these parties' positions increases back in polarized environments. In other words, I expect a non-linear relationship between ideological distance and political knowledge in the Turkish context. There are two reasons for this expectation. First, although respondents have very little motivation for acquiring information about parties that ideologically diverge from their views, polarized media environments tend to emphasize the differences between political parties, enhancing the voters' accuracy of identifying the positions of ideologically distant parties. Secondly, individuals tend to misestimate the stances of parties that are ideologically distant from their views. The effect of this misestimation is more pronounced for parties that have slightly distant ideological positions than the voters' self-placements since there is a limit to the extent voters can push parties with significantly distant positions.

Furthermore, I expect this relationship to be contingent on the levels of affective polarization that voters exhibit. I argue that those who exhibit high levels of affective polarization would be less motivated to acquire information about parties that have moderately distant ideological stances, and reflecting this lack of motivation, their placements of these parties would be more biased. Additionally, as previous literature demonstrates, due to "contrast effect," voters misestimate the ideological positions of the parties they dislike/do not support (Adams, Merrill, and Grofman 2005; Merrill and Adams 2001). In other words, to conform with their negative feelings towards particular parties, polarized individuals overestimate the distance between their ideological self-placement and the parties' stances. Since there is a natural limit to the extent they can push parties with notably distant ideological stances, the effect of this push becomes more pronounced for the parties with only marginally distant ideological stances.

H_{2A} : Ideological distance has a significant and non-linear effect on political knowledge, such that, Turkish voters identify the ideological stances of parties that are ideologically closer or substantially distant to their own views more accurately compared to the parties that have moderately different ideological stances.
H_{2B} : The non-linear effect of ideological distance on political knowledge is contingent on the levels of affective polarization, such that those who exhibit high levels of affective polarization are less accurate in placing political parties with moderately distant ideological stances compared to those with low levels of affective polarization.

The positive effect of following newspapers on political knowledge is well-documented in previous literature (Deli Carpini and Keeter 1996; Elo and Rapeli 2010; Fraile 2011; Fraile and Iyengar 2014; Jerit, Barabas and Bolsen 2006; Moral and Çarkoğlu 2018; Prior 2005). In many democracies, newspapers still better serve to provide political news compared to TV networks or web sources. Consequently, I expect the frequency of following newspapers

to have a positive and significant effect on political knowledge in Turkey. Furthermore, I argue that this effect is contingent on voters' predispositions towards political parties. In other words, I expect newspaper readership to enhance voters' accuracy of placing only the parties they "dislike." The reason behind this expectation is as follows: in a highly fragmented and polarized media environment (Çarkoğlu, Baruh and Yıldırım 2014; Corke et al. 2014; Erdoğan and Semerci 2018; Yıldırım, Baruh and Çarkoğlu 2020), individuals could easily acquire information about the parties they "like" from several mediums. Consequently, the marginal effect of reading newspapers on the accuracy of identifying voters' preferred political parties remains negligible. On the other hand, since newspapers still demonstrate some levels of internal pluralism with respect to the parties they cover (Çarkoğlu, Baruh and Yıldırım 2014; Yıldırım, Baruh and Çarkoğlu 2020), reading newspapers allows voters to acquire more information about the parties they "dislike."

H_{3A} : The frequency of reading newspapers has a positive effect on Turkish voters' accuracy of identifying parties' ideological stances.
H_{3B} : The positive effect of following newspapers is contingent on voters' predispositions towards parties, such that the frequency of reading newspapers increase voters' accuracy of identifying the ideological stances of only the parties that they dislike.

Since most voters in Turkey rely on TV networks as their primary source of political information (Yanatma 2018), investigating the effect of voters' TV channel preferences would produce valuable insights. To the best of my knowledge, to this date, there is no study investigating the effect of TV consumption on political attitudes in Turkey. Gencel Bek (2004) demonstrates that the rise of TV news had given rise to the personalization and tabloidization of politics. On the other hand, the author also demonstrates that these transformations are not uniform across TV channels. Recent literature also suggests the prominence of political polarization in Turkey's media environment along with the incumbent and opposition divide (Çarkoğlu, Baruh and Yıldırım 2014; Corke et al. 2014; Erdoğan and Semerci 2018; Yıldırım, Baruh and Çarkoğlu 2020). Consequently, I expect that those who follow TV channels that favor the incumbent parties (opposition parties) would be more accurate in their placements of the incumbent (opposition parties) and less accurate in placing the opposition parties (incumbent parties).

H_4 : Voters who follow TV channels whose viewers are predominantly incumbent(opposition)-minded individuals, are more accurate in their placements of the incumbent (opposition) parties.

3.4 Research Design

The data for this chapter come from the last three waves of the Turkish Election Studies (TES) (2011, 2015, and 2018) as part of the Comparative Study of Electoral Systems project. The TES contain post-election surveys and cast light upon a variety of socio-political attributes of the Turkish public. Although the TES provide a unique opportunity to study the individual and contextual determinants of political knowledge in Turkey, they do not offer much insight on the effect of electoral proximity, which was a key explanatory variable of the previous chapter. Since the surveys are conducted after the parliamentary elections, the electoral proximity variables in the TES exhibit a limited variation, ranging between one to three months.

Despite this disadvantage of the TES, due to its comprehensive coverage of socio-political characteristics and political behavior of the Turkish public, I employ the data from these studies in the empirical analyses of this chapter. Lastly, since the samples in the TES are randomly drawn and the sample designs include clustering and stratification to enhance the representativeness of the samples, pooling the samples and exploiting the over-time variation are feasible. In other words, since the samples in each wave of the TES are representative of the Turkish voting eligible populace, it is possible to track the changes in political knowledge of the Turkish electorate between 2011 and 2018.

3.4.1 Dependent Variable

In this chapter, similarly to the previous one, political knowledge is measured as respondents' ability to correctly place political parties on the left-right ideological spectrum. TES contain items that ask respondents to place political parties on the left-right ideological scale. I measure political knowledge as the average difference between a respondent's placement of a particular political party and the true ideological stance of this party. Then, I reverse-code the variable so that higher values would indicate higher accuracy of identifying party positions.

I operationalize the true ideological stances of political parties in two ways: first, following Gordon and Segura (1997), the true position of a party is calculated as the mean of all valid placements that respondents provide in a given country in a given year. For the second measurement of true party stances, I rely on the mean expert placements in the Chapel Hill Expert Surveys (CHES). CHES ask country experts to identify the ideological stances of political parties on a variety of issues. I measure political knowledge as the difference between respondents' placement of political parties on the left-right ideological

spectrum and the mean value of country expert placements of political parties in terms of their "overall ideological stances."

If an individual fails to provide a valid placement for a party, as in the previous chapter, I penalized this missing response with a score of mean plus one standard deviation of the difference between the respondents' placement and the true stance of the corresponding political party. Since both ideological spectrums in the TES and CHES range between 0 and 10, where 0 denotes extreme left and 10 denotes extreme right, the *Political Knowledge* variables range between 0 and 10. After the reverse-coding, higher values of *Political Knowledge* indicate higher accuracies in identifying party positions. In other words, higher values of *Political Knowledge* indicate lower absolute distances between respondents' placements of political parties and these parties' true ideological stances.

3.4.2 Independent Variables

In this chapter, the main explanatory variables are ideological distance, like/dislike of political parties, affective polarization, partisanship, and electoral proximity. The *Ideological Distance* variable measures the absolute distance between the self-placement of a respondent on the left-right scale and the true ideological stances of political parties (derived both from mean and expert placements). *Ideological Distance* variable ranges between 0 and 10, and lower values indicate a higher congruence between the party and respondent. The TES asks respondents the extent they like or dislike particular political parties. From this survey item, I generate the *Like/Dislike Party* variable that measures respondents' feelings towards particular political parties. The variable ranges between 0 and 10, where 0 indicates a strong dislike and 10 indicates a strong affection towards political parties.

Measuring affective polarization in a multi-party setting is a challenging task. Students of American politics measure affective polarization as the differences between feelings towards the Democrat and Republican Parties (Iyengar et al. 2012; Webster and Abramowitz 2017). Similarly, I measure *Affective Polarization* as the distance between a respondent's highest *Like/Dislike* score for any parliamentary party and the mean of *Like/Dislike* scores that the respondent assigns to the other parties. *Partisanship* is a dummy variable that scores 1 if respondents report being a partisan of the corresponding party and 0 otherwise. Finally, I measure electoral proximity as the number of days between the date of the parliamentary elections preceding the interview and the interview date.

Another set of key explanatory variables measures respondents' media consumption patterns. A drawback of this set of variables is that those are only available for the 2018 module of the TES. *Following Newspapers*, *Following TV*, and *Following the Web* variables provide information about the frequencies that respondents follow the news in these

mediums, where 1 denotes "never," and 7 denotes "every day." In addition, TES 2018 Module provides information on respondents' preferred newspapers, TV networks, and websites that they follow the news. While almost all respondents report their preferred TV networks, only half of the sample report their preferred newspapers or websites to follow the news. Furthermore, approximately 75% of the respondents in the 2018 module assert that their preferred medium of following the news is TV. Consequently, to assess the effect of following distinct media outlets on political knowledge, I investigate the differences in respondents' preferred TV news networks.

Following Yıldırım, Baruh, and Çarkoğlu (2020), to classify the TV channels, I employ a factor analysis with respect to the distribution of party preferences for the 15 most followed TV channels' viewers.[2] The factor analysis suggests three distinct categories: (1) a group of TV channels that are predominantly followed by the supporters of the incumbent alliance, (2) a group of TV channels whose viewers' party preferences are partially equally distributed, and (3) a group of TV channels whose viewers predominantly voted for the opposition alliance in the previous parliamentary election. As Çarkoğlu and Yavuz (2010) argues, a concentration of readers/viewers with almost uniform political views indicate the media outlets' alignment with these particular ideologies. Consequently, assuming that the distribution of its viewers signals, if not a byproduct of, partisan leanings of these TV networks, I generate a *Channel Preference* variable that scores 0 for incumbent-supporting networks, 1 for mainstream networks whose viewers are somewhat equally distributed, and 2 for opposition-supporting networks.

I also introduce two sets of control variables. The first one is concerned with demographics, such as gender, age, education, and urban/rural residence; while the second one is concerned with socio-political attributes, such as the number of political parties that the respondent cannot place, political interest, and the degree of following elections on the media.[3] Since the *Education* variable is an ordinal variable and its categories vary across modules, I standardize this variable within modules. This operation requires making the assumption that the average education levels do not vary in Turkey between 2011 and 2018. The *Urban Residency* variable scores 1 for individuals who reside in rural parts, 2 for individuals who reside in small towns, 3 for individuals who reside in the suburbs of large cities, and 4 for individuals who reside in large cities or towns. Lastly, to control for the unobserved election-specific factors, I introduce two dummy variables for the years 2015 and 2018.

[2]The details of this analysis are provided in the appendices.

[3]Political interest and the degree of following elections on the media are only available for the 2018 elections.

3.4.3 Data Format

After merging three modules of the TES and operationalizing the variables, I transformed the data format such that the unit of analysis is party-respondent dyads instead of respondents. In the stacked data format, each respondent enters the data 5 times and constitutes 5 observations as *R*-AKP, *R*-CHP, *R*-HDP, *R*-MHP, and *R*-IYIP.[4] There are three compelling reasons for this transformation. First, this transformation yields a larger sample size. Second, stacked data format allows us to control for varying accuracies of identifying different political parties without specifying distinct models for every political party. For instance, stacked data format allows one to investigate the effect of partisanship or ideological distance on political knowledge without specifying five distinct models that account for the average accuracies of identifying ideological stances of the five parliamentary parties, which would make interpreting the effects of other variables a challenging task. Lastly, stack data format allows us to account for the effects of party-specific variables.

3.5 Empirical Analyses and Findings

Table 1 presents the OLS regression estimates on respondents' accuracy of identifying party positions, measured as the difference between the respondents' placement and the mean placement or the expert placement of the corresponding political party. The base models in Table 1 provide empirical support for the hypothesis that ideological distance has a significant and non-linear effect on political knowledge. Furthermore, as expected, affective polarization appears to have a negative and statistically significant effect on political knowledge. In other words, Models in Table 1 suggest that respondents who strongly like a particular party and dislike the others, on average, know less about the ideological stances of the parliamentary political parties.

To assess the interactive effect of ideological distance and affective polarization on political knowledge, I introduce the interaction terms consisting of ideological distance, its square, and affective polarization into the models. When political knowledge is measured as the distance between respondents' placements and the mean placement of a particular political party, the coefficients associated with the interaction terms appear to be indistinguishable from zero even at 90% confidence level.

On the other hand, when true party stances are coded from the *Chapel Hill Expert Surveys*, the coefficients associated with these are statistically distinguishable from zero at 99%

[4]Since IYIP was formed in 2017, respondent-party dyads containing IYIP have non-missing observations only for 2018 elections.

confidence level, suggesting the existence of an interactive effect of ideological distance and affective polarization on political knowledge. A striking finding is that when the interaction terms are included in the models, the significance of its constituent terms disappear in Model 2 in Table 1. To have a clearer picture, Figure 1 plots the linear predictions of political knowledge as conditional on ideological distance and affective polarization.

Table 3.1 OLS Regression Estimates on Average Accuracy of Identifying Party Positions

	B1: Mean P.	M1: Mean P.	B2: Expert P.	M2: Expert P.
Ideological Distance	-0.1170***	-0.1362**	-0.2247***	0.1023
	(0.0229)	(0.0639)	(0.0251)	(0.0695)
Ideological Distance^2	0.0196***	0.0218***	0.0326***	-0.0032
	(0.0026)	(0.0074)	(0.0030)	(0.0082)
Affective Polarization	-0.0396***	-0.0441**	-0.0525***	0.0250
	(0.0076)	(0.0179)	(0.0079)	(0.0181)
I.Distance × Polarization		0.0030		-0.0501***
		(0.0094)		(0.0101)
I.Distance^2 × Polarization		-0.0003		0.0055***
		(0.0011)		(0.0011)
# of Days After Election	-0.0002	-0.0002	-0.0021	-0.0021
	(0.0017)	(0.0017)	(0.0018)	(0.0018)
Like/Dislike Party	0.0395***	0.0397***	0.0769***	0.0753***
	(0.0060)	(0.0060)	(0.0067)	(0.0067)
Partisanship	0.0440	0.0441	-0.0793	-0.0758
	(0.0449)	(0.0449)	(0.0499)	(0.0503)
# of Parties not Placed by R	0.0652**	0.0652**	-0.0110	-0.0079
	(0.0322)	(0.0322)	(0.0345)	(0.0343)
Age	0.0018	0.0018	0.0026**	0.0027**
	(0.0012)	(0.0012)	(0.0013)	(0.0013)
Urban Residency	0.0315**	0.0315*	0.0475***	0.0478***
	(0.0161)	(0.0161)	(0.0175)	(0.0175)
Education	0.0121	0.0120	0.0616***	0.0620***
	(0.0189)	(0.0189)	(0.0203)	(0.0203)
Female	0.0231	0.0231	-0.0616*	-0.0627*
	(0.0342)	(0.0342)	(0.0368)	(0.0368)
2015 Dummy	-0.0410	-0.0406	0.4815***	0.4692***
	(0.0471)	(0.0472)	(0.0514)	(0.0516)
2018 Dummy	-0.1732***	-0.1735***	0.3494***	0.3418***
	(0.0417)	(0.0416)	(0.0460)	(0.0459)
Constant	8.4004***	8.4293***	7.8511***	7.3471***
	(0.1341)	(0.1692)	(0.1419)	(0.1724)
N	10442	10442	10442	10442
R^2	0.0242	0.0242	0.0574	0.0600

* p<0.1, ** p<0.05, *** p<0.01, two tailed tests.

Robust standard errors clustered by respondents in parentheses.

Figure 3.1 Linear Predictions of *Political Knowledge* as Conditional on *Ideological Distance* and *Affective Polarization* - Based on Model 2 in Table 1

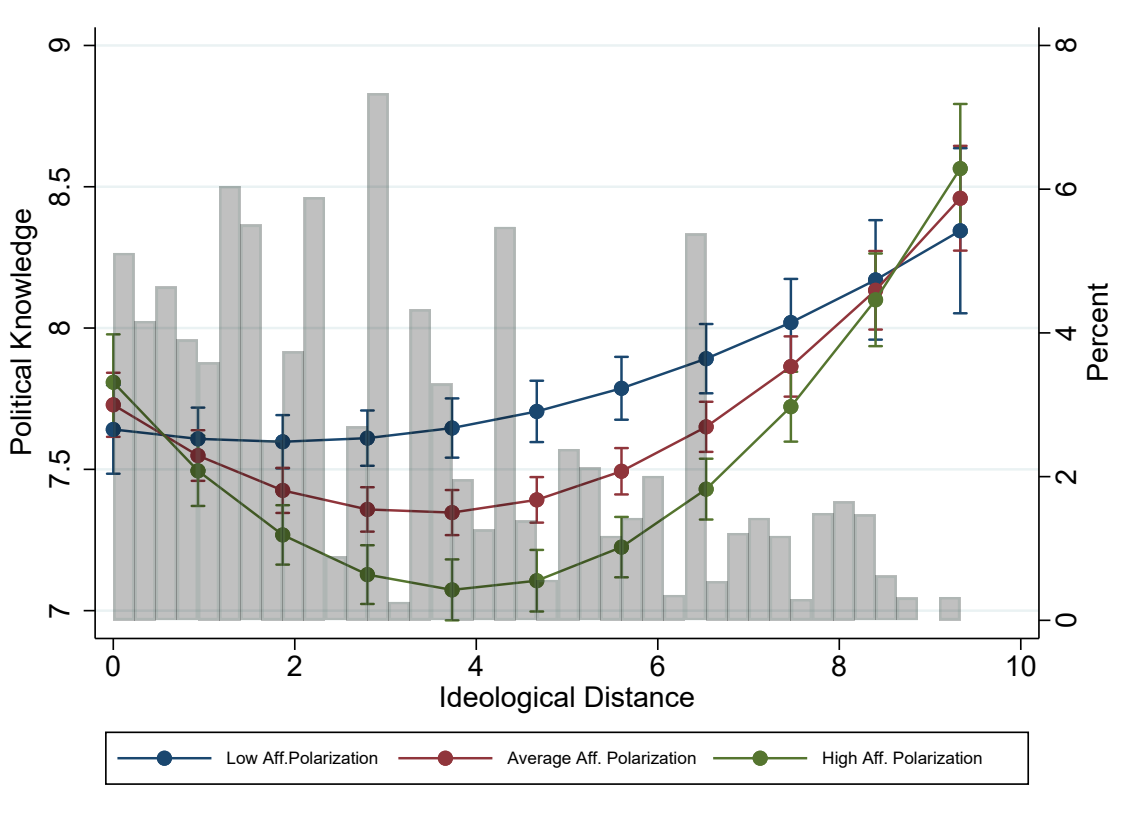


Figure 1 provides empirical support for the non-linear effect of ideological distance on political knowledge. More importantly, it demonstrates that this effect is contingent on the levels of affective polarization that respondents exhibit. When respondents were asked to place parties that are ideologically closer to their views, the effect of affective polarization is statistically insignificant. However, respondents who report higher levels of affective polarization (i.e., who score at the 90^{th} percentile of the *Affective Polarization* variable) are significantly less accurate in their placements of parties that have moderately distant ideological stances. It could be argued that those who exhibit high levels of affective polarization push the parties they dislike away from their self-placements on the ideological scale. Simply put, to conform with their negative predispositions towards particular parties, polarized individuals overstate the distance between their ideological self-placement and the parties' stances. Because there is a natural limit to the extent they can push parties with notably distant ideological stances, the effect of this push becomes more prominent for the parties with only marginally distant ideological positions.

While the predicted accuracy scores for respondents who report low levels of affective polarization (i.e., who score at the 10^{th} percentile of the *Affective Polarization* variable) almost linearly increase as the ideological distance increases, it follows a U-shaped curve for the other two categories. Furthermore, the decrease in the accuracy of identifying party ideologies is significantly more severe for respondents who report high levels of polarization.

A respondent who exhibits low levels of affective polarization is almost equally accurate in placing parties that are 0 and 4.7 points away from her ideological stance. On the other hand, a highly polarized respondent's placement of a party that is 4.7 points distant from her stance is .7 points lower than her placement of a party that is at the same position with her.

Table 1 also demonstrates that a key explanatory variable of the previous chapter, the *# of Days After Election* variable, appears to have no effect on political knowledge that is statistically distinguishable from zero. The reason behind this might be the limited variance that the variable exhibits. As noted above, the TES are conducted at most three months after elections, resulting in a neglible level of variance to test the effect of electoral proximity on political knowledge in Turkey. Furthermore, Table 1 provides empirical support for the positive effect of positive feelings towards political parties. In other words, respondents who "like" a particular party, on average, are more accurate in identifying the ideological stances of these parties compared to respondents who "dislike" the party.

Several control variables have the expected effects on the dependent variables. When party stances are coded as the mean placements, *# of Parties not Placed by R* and residing in urban parts of the country have a positive and significant effect on political knowledge. On the other hand, the coefficient associated with the *2018 Dummy* is negative and statistically distinguishable from zero at 99% confidence level which implies that in 2011, on average, respondents were more accurate in their placements compared to their counterparts in 2018. When true party stances are coded from the *CHES*, age, residing in urban parts of the country and education have statistically significant and positive effects on political knowledge. Moreover, the coefficients associated with the *2015* and *2018 Dummies* are positive and statistically distinguishable from zero at 99% confidence level. In other words, the average accuracy of identifying party stances is higher both in 2015 and 2018 compared to 2011.

Since the models in which the true stances of parties are coded from the *CHES* provide a better fit to the data, in the remainder of this chapter, I will employ this version of the dependent variable in the further analyses. Unexpectedly, the coefficients associated with *Partisanship* are not distinguishable from zero in any model in Table 1. This statistical insignificance might be due to the direction of *Partisanship*'s effect varying across political parties. To account for this, I introduce party dummies and their interactions with the *Partisanship* variable in Table 2.

Model 1 in Table 2 suggests that, on average, respondents were less accurate in identifying the ideological stances of CHP, MHP, and IYIP compared to AKP. Model 2 introduces the interaction terms consisting of party dummies and *Partisanship* into the analysis. It is important to note that while the coefficient associated with *Partisanship* is not statistically distinguishable from zero in the Base Model, it is so in Models 1 and 2. In addition, the statistical significance of the interaction terms suggests a conditional relationship be-

tween party preferences and *Partisanship*. Figure 2 plots the average marginal effects of *Partisanship* on political knowledge for the five parliamentary political parties separately.

Table 3.2 OLS Regression Estimates on Average Accuracy of Identifying Party Positions Controlling for Partisanship

	Base Model	Model 1	Model 2
Ideological Distance	0.1023	-0.0248	-0.0106
	(0.0695)	(0.0694)	(0.0696)
Ideological Distance^2	-0.0032	0.0058	0.0047
	(0.0082)	(0.0081)	(0.0081)
Affective Polarization	0.0250	-0.0156	-0.0106
	(0.0181)	(0.0182)	(0.0182)
I.Distance × Affective Polarization	-0.0501***	-0.0217**	-0.0231**
	(0.0101)	(0.0101)	(0.0102)
I.Distance^2 × Affective Polarization	0.0055***	0.0025**	0.0026**
	(0.0011)	(0.0011)	(0.0011)
# of Days After Election	-0.0021	-0.0019	-0.0021
	(0.0018)	(0.0018)	(0.0018)
Like/Dislike Party	0.0753***	0.0721***	0.0771***
	(0.0067)	(0.0069)	(0.0070)
Partisanship	-0.0758	-0.1883***	-0.1699***
	(0.0503)	(0.0509)	(0.0589)
CHP Dummy		-0.8782***	-0.8169***
		(0.0356)	(0.0477)
HDP Dummy		-0.0659*	-0.0023
		(0.0395)	(0.0484)
MHP Dummy		-0.3272***	-0.3465***
		(0.0407)	(0.0464)
IYIP Dummy		-0.9979***	-1.0129***
		(0.0704)	(0.0755)
CHP Dummy × Partisanship			-0.2260**
			(0.0880)
HDP Dummy × Partisanship			-0.6039***
			(0.1608)
MHP Dummy × Partisanship			0.4146***
			(0.1196)
IYIP Dummy × Partisanship			0.9008***
			(0.2095)
# of Parties not Placed by R	-0.0079	0.0327	0.0368
	(0.0343)	(0.0347)	(0.0348)
Age	0.0027**	0.0029**	0.0028**
	(0.0013)	(0.0012)	(0.0012)
Urban Residency	0.0478***	0.0500***	0.0517***
	(0.0175)	(0.0174)	(0.0174)
Education	0.0620***	0.0638***	0.0644***
	(0.0203)	(0.0203)	(0.0205)
Female	-0.0627*	-0.0641*	-0.0672*
	(0.0368)	(0.0366)	(0.0369)
2015 Dummy	0.4692***	0.4855***	0.4908***
	(0.0516)	(0.0512)	(0.0515)
2018 Dummy	0.3418***	0.4880***	0.4873***
	(0.0459)	(0.0459)	(0.0460)
Constant	7.3471***	7.9033***	7.8362***
	(0.1724)	(0.1754)	(0.1781)
N	10442	10442	10442
R^2	0.0600	0.1110	0.1156

* p<0.1, ** p<0.05, *** p<0.01, two tailed tests.

Robust standard errors clustered by respondents in parentheses.

Base category for political party dummies is the AKP.

Figure 3.2 Average Marginal Effects of Partisanship on Political Knowledge as Conditional on Political Parties

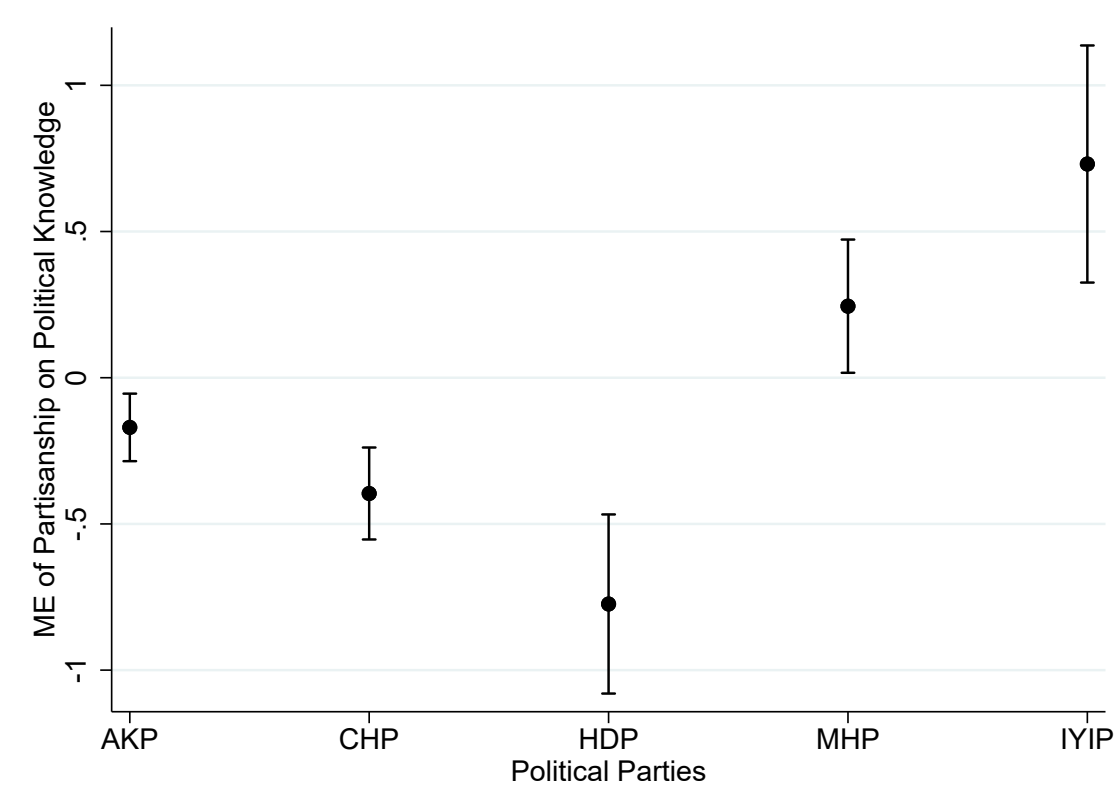


Figure 2 demonstrates that while AKP, CHP, and HDP supporters are less accurate in identifying the ideological stances of the parties they support than the the non-supporters; MHP and IYIP supporters are, on average, more accurate in their placements of the parties they support at 95% confidence level. To put it into perspective, holding other variables constant, the accuracies of AKP, CHP, and HDP supporters in terms of placing their political parties are .17, .4, and .77 points lower compared to non-supporters of the corresponding parties. On the contrary, for MHP and IYIP supporters, being a partisan of the party enhances the average accuracies of placing their parties by .24 and .73 points, respectively.

The TES also allows for addressing the effects of media consumption patterns on political knowledge. However, only the 2018 module contains the items related to media consumption. Consequently, the number of party-respondent dyads in the sample decreases from 10442 to 3944. Table 3 presents the OLS regression estimates on average accuracy of placing political parties on the left-right spectrum and provides empirical support for the hypothesis that *Political Interest* has a positive and statistically significant effect on political knowledge. On the other hand, the coefficients associated with the *Degree of Following the Elections* variable are not statistically distinguishable from zero in any model in Table 3.

Table 3.3 OLS Regression Estimates on Average Accuracy of Identifying Party Positions Controlling for Media and Interest Variables

	Base Model	Model 1	Model 2	Model 3
Ideological Distance	-0.2164***	0.1738*	0.1844*	0.1834*
	(0.0404)	(0.1016)	(0.1014)	(0.1014)
Ideological Distance^2	0.0340***	-0.0154	-0.0172	-0.0177
	(0.0048)	(0.0113)	(0.0113)	(0.0113)
Affective Polarization	-0.0650***	0.0152	0.0173	0.0164
	(0.0158)	(0.0313)	(0.0311)	(0.0310)
I.Distance × Affective Polarization		-0.0642***	-0.0658***	-0.0654***
		(0.0165)	(0.0165)	(0.0166)
I.Distance^2 × Affective Polarization		0.0081***	0.0083***	0.0084***
		(0.0018)	(0.0018)	(0.0018)
Following TV			0.0165	0.0176
			(0.0240)	(0.0240)
Following Newspapers			0.0424***	0.0679***
			(0.0149)	(0.0190)
Following the Web			-0.0150	-0.0151
			(0.0140)	(0.0140)
Like/Dislike Party	0.1002***	0.0995***	0.0987***	0.1248***
	(0.0111)	(0.0113)	(0.0112)	(0.0150)
Like/Dislike Party × Following Newspapers				-0.0074***
				(0.0026)
# of Days After Election	0.0018	0.0017	0.0015	0.0015
	(0.0028)	(0.0028)	(0.0028)	(0.0028)
Partisanship	-0.0403	-0.0330	-0.0265	-0.0260
	(0.0732)	(0.0734)	(0.0732)	(0.0729)
# of Parties not Placed by R	0.0260	0.0273	0.0323	0.0320
	(0.0640)	(0.0639)	(0.0636)	(0.0635)
Political Interest	0.1050**	0.1033**	0.0995**	0.0999**
	(0.0494)	(0.0493)	(0.0503)	(0.0502)
Degree of Following the Elections	-0.0465	-0.0431	-0.0697	-0.0688
	(0.0534)	(0.0534)	(0.0529)	(0.0529)
Age	0.0080***	0.0081***	0.0070***	0.0070***
	(0.0024)	(0.0024)	(0.0025)	(0.0025)
Urban Residency	0.0259	0.0276	0.0271	0.0266
	(0.0325)	(0.0326)	(0.0326)	(0.0326)
Education	0.0636***	0.0641***	0.0533***	0.0535***
	(0.0187)	(0.0186)	(0.0200)	(0.0200)
Female	-0.1267*	-0.1295*	-0.1099*	-0.1070
	(0.0658)	(0.0660)	(0.0657)	(0.0657)
Constant	7.4676***	6.9604***	6.9044***	6.8093***
	(0.2830)	(0.3147)	(0.3456)	(0.3477)
N	3944	3944	3944	3944
R^2	0.0668	0.0708	0.0741	0.0756

* p<0.1, ** p<0.05, *** p<0.01, two tailed tests.

Robust standard errors clustered by respondents in parentheses.

Models 2 and 3 in Table 3 suggest that those who read newspapers more frequently are more accurate in their placements of political parties compared to voters who follow newspapers less frequently. On the other hand, respondents who frequently follow TV news or Web sources are not more accurate in their placements compared to their counterparts who follow these mediums less frequently. To put it into perspective, Model 2 suggests that a respondent who report reading newspapers every day is on average .25 more accurate

in identifying ideological stances of political parties compared to a respondent who report never reading newspapers.

I introduce an interaction term consisting of the *Like Dislike Party* and *Following Newspapers* variables to investigate which parties frequent newspapers readers place more accurately than those who do not follow the newspapers. The coefficient associated with this interaction term is statistically distinguishable from zero at 99% confidence level, providing empirical support for the existence of a conditional relationship between the *Like/Dislike Party* and *Following Newspapers* variables. To illustrate this conditional relationship, Figure 3 depicts the average marginal effects of *Following Newspapers* as conditional on *Like/Dislike Party*.

Figure 3.3 Average Marginal Effects of *Following Newspapers* as Conditional on *Like/Dislike Party* - Based on Model 3 in Table 3

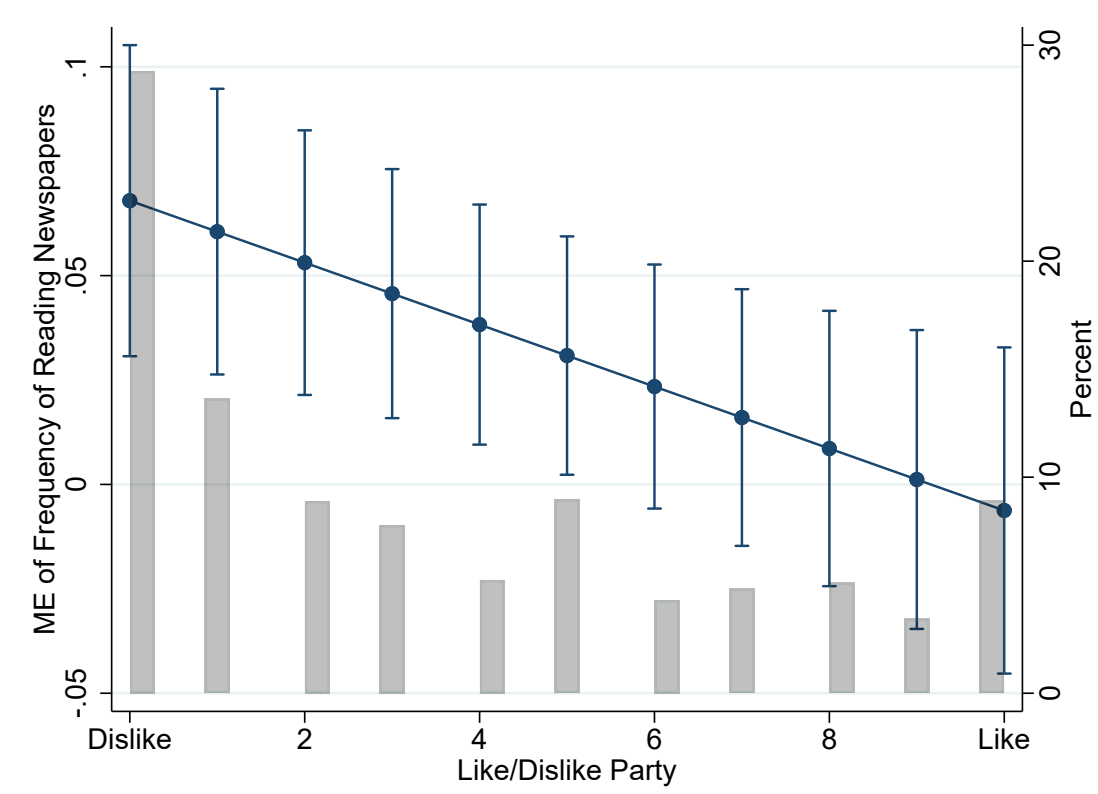


Figure 3 suggests that, *ceteris paribus*, the frequency of following newspapers enhances a respondent's accuracy of identifying the ideological stances of political parties that they dislike. In other words, in line with Moral and Çarkoğlu's (2018) findings, as a respondent's feelings towards a particular party become more positive, the positive effect of following newspapers disappears. This might be due to two reasons. First, it might be the case that individuals tend to seek less information about the parties that they dislike, and reading newspapers might mitigate the effects of this tendency by providing at least some information about these political parties. Secondly, individuals tend to know more about

Table 3.4 OLS Regression Estimates on Average Accuracy of Identifying Party Positions Controlling for Media, Interest, TV Network Preference and Party Variables

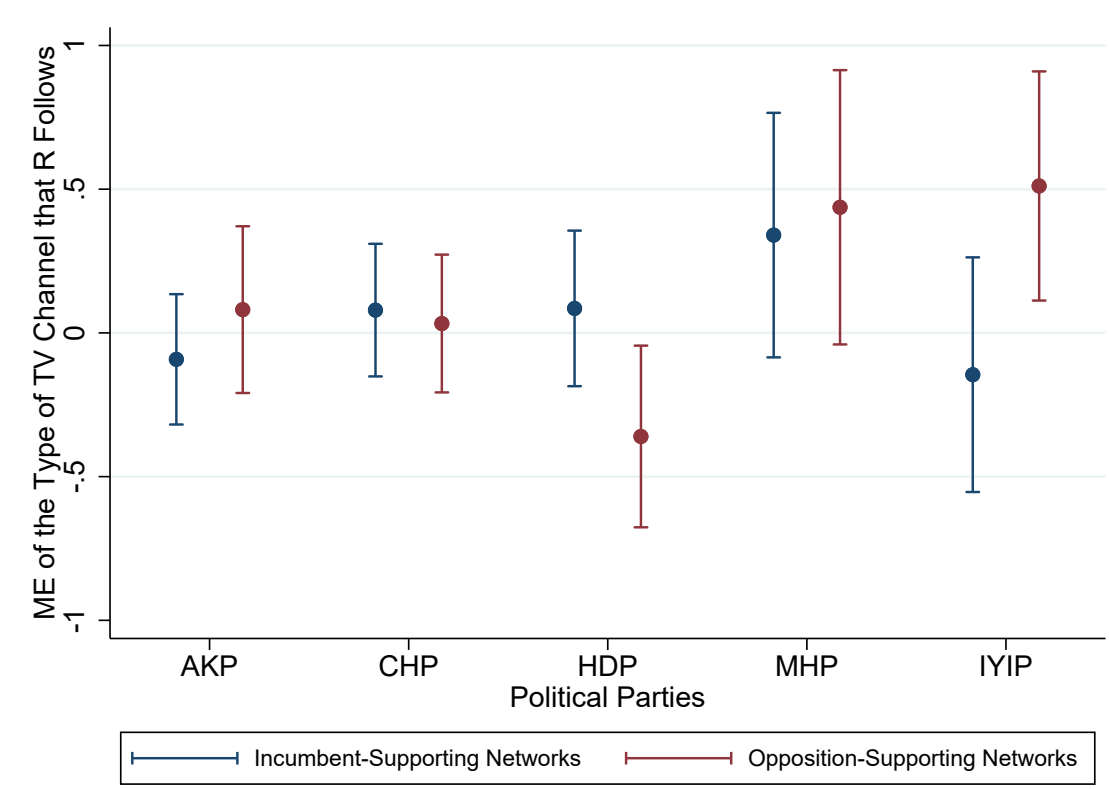
	Base Model	Model 1	Model 2
Ideological Distance	0.1764*	0.1726	0.0446
	(0.1050)	(0.1048)	(0.1083)
Ideological Distance^2	-0.0196	-0.0193	-0.0085
	(0.0121)	(0.0121)	(0.0123)
Affective Polarization	0.0073	0.0072	0.0092
	(0.0312)	(0.0315)	(0.0328)
I.Distance × Affective Polarization	-0.0608***	-0.0603***	-0.0446**
	(0.0167)	(0.0167)	(0.0173)
I.Distance^2 × Affective Polarization	0.0081***	0.0080***	0.0055***
	(0.0019)	(0.0018)	(0.0019)
# of Days After Election	0.0001	-0.0001	0.0010
	(0.0030)	(0.0030)	(0.0029)
Like/Dislike Party	0.1235***	0.1236***	0.1118***
	(0.0156)	(0.0156)	(0.0175)
Following Newspapers	0.0604***	0.0590***	0.0513***
	(0.0197)	(0.0201)	(0.0198)
Like/Dislike Party × Following Newspapers	-0.0070**	-0.0069**	-0.0044*
	(0.0027)	(0.0027)	(0.0026)
Following Incumbent-Supporting Networks		0.0557	-0.0919
		(0.0971)	(0.1155)
Following Opposition-Supporting Networks		0.1040	0.0809
		(0.1044)	(0.1477)
CHP Dummy			-0.5116***
			(0.1213)
HDP Dummy			0.3025*
			(0.1689)
MHP Dummy			-0.7859***
			(0.1970)
IYIP Dummy			-0.9875***
			(0.1781)
CHP Dummy × Following Incumbent-Supporting Networks			0.1712
			(0.1366)
CHP Dummy × Following Opposition-Supporting Networks			-0.0483
			(0.1751)
HDP Dummy × Following Incumbent-Supporting Networks			0.1771
			(0.1663)
HDP Dummy × Following Opposition-Supporting Networks			-0.4412**
			(0.2104)
MHP Dummy × Following Incumbent-Supporting Networks			0.4321*
			(0.2253)
MHP Dummy × Following Opposition-Supporting Networks			0.3561
			(0.2317)
IYIP Dummy × Following Incumbent-Supporting Networks			-0.0534
			(0.2202)
IYIP Dummy × Following Opposition-Supporting Networks			0.4303**
			(0.2181)
# of Parties not Placed by R	0.0162	0.0151	0.0232
	(0.0698)	(0.0699)	(0.0710)
Partisanship	-0.0529	-0.0575	-0.3213***
	(0.0757)	(0.0754)	(0.0858)
Following TV	0.0491	0.0504	0.0507
	(0.0562)	(0.0558)	(0.0551)
Following the Web	-0.0084	-0.0086	-0.0072
	(0.0142)	(0.0141)	(0.0140)
Political Interest	0.0939*	0.0870	0.0844
	(0.0529)	(0.0530)	(0.0522)
Degree of Following the Elections	-0.0683	-0.0654	-0.0544
	(0.0564)	(0.0565)	(0.0557)
Age	0.0076***	0.0073***	0.0072***
	(0.0026)	(0.0026)	(0.0026)
Urban Residency	0.0199	0.0175	0.0207
	(0.0341)	(0.0338)	(0.0332)
Education	0.0598***	0.0585***	0.0583***
	(0.0208)	(0.0210)	(0.0210)
Female	-0.1086	-0.1109*	-0.1098*
	(0.0672)	(0.0666)	(0.0655)
Constant	6.7217***	6.7019***	7.2631***
	(0.4851)	(0.4883)	(0.4953)
N	3610	3610	3610
R^2	0.0740	0.0745	0.1263

* p<0.1, ** p<0.05, *** p<0.01, two tailed tests.

Robust standard errors clustered by respondents in parentheses.

Base category for TV channel preferences is following mainstream outlets, and for political party dummies is AKP.

Figure 3.4 Average Marginal Effects of TV Network Preferences on Political Knowledge as Conditional on Political Parties



the parties that they like, and newspapers in Turkey might fail to provide these individuals with additional information that would enhance their ability to accurately identify these parties' ideological stances.

As described in the previous chapter, I classify the TV channels that respondents follow to receive the news. From this categorical variable, I generate two dummies: *Following Incumbent-Supporting Networks* scores 1 if the respondent's preferred TV network is followed predominantly by supporters of the incumbent alliance, and *Following Opposition-Supporting Networks* scores 1 if the respondent's preferred TV network is followed predominantly by supporters of the opposition parties. Introducing these two variables into the Base Model does not enhance the explanatory power of the model, as the coefficients associated with these two variables are not distinguishable from zero and their effects are not jointly significant. On the other hand, when the party dummies and their interactions with the network preference variables are introduced, the model fit substantially increases. This increase suggests that the effect of TV channels that respondents follow on political knowledge is not uniform, rather it varies across political parties. To further examine this, Figure 4 plots the average marginal effects of the type of TV network that respondents follow on political knowledge as conditional on political parties.

Figure 4 demonstrates that the effect of TV network preferences is not statistically dis-

tinguishable from zero at 95% confidence level for AKP, CHP, and MHP. On the other hand, those who follow opposition-supporting TV networks are significantly less accurate in identifying the ideological stance of HDP and more accurate in identifying the stance of IYIP. I argue that the effects of TV network preferences are insignificant for AKP, CHP, and MHP, since these parties are relatively well-established and widely known. On the other hand, IYIP was established in late 2017; thus, it is not surprising for the Turkish electorate to have less information about its ideological stance. During the campaign period, opposition-supporting networks promoted IYIP and provided more information about the party (Organization for Security and Co-operation in Europe 2018). Consequently, those who follow these TV networks could acquire more information about the party; thus, they could identify the ideological stance of IYIP more accurately.

On the other hand, during the 2018 election campaign, TV channels that are close to the incumbent dedicated very little airtime to HDP and its policies, and their tones were predominantly negative (Office for Democratic Institutions and Human Rights 2018). On the other hand, opposition-oriented channels covered HDP and its policies in a relatively balanced and positive way. Since HDP is a radical left party in the Turkish context (e.g., CHES place HDP on 1.67 on the conventional left-right scale), this difference in attitudes transforms into opposition-minded individuals' lower accuracies in placing HDP on the ideological scale –possibly pulling the party towards themselves (i.e., positive projection bias).

3.6 Discussion

This chapter investigates the socio-political determinants of political knowledge in Turkey. Turkey stands out as a perfect case for investigating the ways individuals navigate and acquire political knowledge under heavily fragmented and polarized media environments (Çarkoğlu, Baruh, and Yıldırım 2014; Corke et al. 2014; Erdoğan and Semerci 2018; Yıldırım, Baruh and Çarkoğlu 2020). Rather than addressing the causal link between media polarization and political knowledge, this chapter explores the individual determinants of political knowledge in close and censored media environments (Andı, Aytaç and Çarkoğlu 2019; Behrouzian et al. 2016). The empirical findings of this chapter suggest that citizens' attitudes towards political parties have substantial effects on their political knowledge. More specifically, the ideological distance between voters' self-placements and ideological stances of political parties, voters' predispositions towards particular parties, and the extent that they favor one party over the others strongly influence their levels of political knowledge.

This chapter offers strong empirical support for the non-linear effect of ideological distance between voters and political parties on voters' levels of political knowledge. Turkish voters are more accurate in identifying the ideological stances of parties that are quite distant from their ideologies or parties that are ideologically close to their views. Furthermore, this non-linear effect of ideological distance is contingent on affective polarization. Voters who strongly favor one party over the others are significantly less accurate in placing parties that are neither close nor too distant to their views. Having positive attitudes towards political parties also increases the accuracy of voters in identifying the ideological stances of these parties. This finding suggests bipolarity in Turkish politics, as Turkish voters who have positive predispositions towards particular parties are more motivated to seek information about these parties. On the other hand, those who "dislike" parties do not seek or possess much information about these parties. Consequently, it is very unlikely for voters who dislike particular parties to change their predispositions towards these parties.

Lastly, while the partisans of AKP, CHP, and HDP are less accurate in identifying their parties' ideological stances, partisans of MHP and IYIP place their parties more accurately compared to non-partisans. Since both the MHP and IYIP are nationalist (single-issue) parties and partisans of these parties almost uniformly exhibit nationalistic tendencies, they can easily identify the positions of their parties on the ideological scale. On the other hand, AKP, CHP, and HDP are all concerned with a wide range of socio-political issues. Furthermore, the partisans of these parties do not possess an overarching ideology like nationalism. As a result of these, being a partisan of these parties does not give rise to increased accuracies of identifying the ideological stances of the parties.

On top of these political factors, Turkish voters' media consumption patterns also affect their levels of political knowledge. The frequency of following newspapers has a positive and statistically significant effect on political knowledge. This positive effect of following newspapers is contingent on voters' predispositions towards political parties. As Turkish voters read newspapers more frequently, their accuracy in identifying the ideological stances of the parties that they "dislike" increases. Furthermore, contrary to prior expectations, the political affiliations of the TV channels that individuals prefer have very little effect on political knowledge. While following opposition-oriented TV channels increases the accuracy of IYIP placements, it decreases the accuracy of HDP placements. On the other hand, following incumbent-supporting TV channels have no observable effect on political knowledge.

Due to data availability issues, the analyses in this chapter cannot shed light on the causal link between media polarization, media outlet preferences, and political knowledge. Panel data that track the changes in individual political knowledge as a result of media consumption patterns would help us draw inferences on the causal link between political knowledge and media consumption. Furthermore, although Turkey is a suitable case to investigate how citizens operate in polarized media environments, a cross-country analysis over a longer period of time would produce more valid estimates. Lastly, the classification

of TV channels according to the party preference distributions of their viewers remains limiting. A content analysis of the news stories that these channels cover would yield a better proxy for identifying their political affiliations.

Nevertheless, this chapter paves the way for a fruitful research agenda. Although there are prolific studies that investigate the politicization of newspapers in Turkey (Çarkoğlu, Baruh and Yıldırım 2014; Moral and Çarkoğlu 2018; Yıldırım, Baruh and Çarkoğlu 2020), very few studies (Andı, Aytaç and Çarkoğlu 2019; Behrouzian et al. 2016; Moral and Caroglu 2018) examine the effect of political polarization of media on political behavior in the Turkish context. Further studies should examine the linkages between media consumption patterns and different forms of political behavior and public opinion formation in Turkey. Furthermore, the polarization of Turkish TV channels and the effect of this polarization on citizens' perceptions and political behavior remain as fertile grounds for future research.

4. CONCLUSION

Despite the proliferation of cable TV, the Internet, and social media platforms, students of political knowledge have demonstrated a rather pessimistic reality about contemporary politics. Even in consolidated democracies, the masses are unexpectedly lowly knowledgeable about politics, if not politically illiterate (Luskin 1990; Prior 2005). Since political knowledge is sine qua non for the survival and sustainability of democracies, the public's incompetence regarding their low level of political knowledge raises concerns. That is mainly because electoral accountability necessitates citizens to exhibit certain levels of political knowledge so that they can identify those who are responsible for the decision-making process and hold them accountable (Fowler and Margolis 2014). On the other hand, it should be noted that many scholars have challenged the importance of political knowledge for the survival and sustainability of representative democracies.

Lupia (2016), for instance, notes that many political decisions and judgments are based on more than facts, and most political decisions involve diverse values and complex issues. Under these circumstances, citizens' ability to reach the most suitable political decisions does not solely depend on their levels of political knowledge. In other words, Lupia (2016) argues that making informed decisions about politics does not necessitate the ability to correctly recall a specific set of political facts. On the contrary, people can reach competent and sound decisions by relying on different forms of knowledge. For instance, party identification might guide citizens in reaching informed decisions. Knowing party identifications of candidates can help voters cast meaningful ballots as if they possess much higher levels of political knowledge. In short, it might be argued that the masses' political "illiteracy" does not pose a significant threat to the sustainability of democracy. Nevertheless, it is safe to assume that higher levels of political knowledge would facilitate electoral accountability in democracies. Given its significance for a well-functioning democracy, I find the individual and contextual determinants of political knowledge worthy of studying both from a comparative perspective and by investigating its dynamics in a closed and polarized media environment, in Turkey.

As previous studies demonstrate, the media environments and degree of their autonomy from the governments both have substantial effects on political knowledge (Leeson 2008; Jerit, Barabas, and Bolsen 2006; Schoonvelde 2014). Although the relationship between media freedom and political knowledge is well documented in recent literature, existing

research do not offer much insights into the dynamic nature of this relationship. The literature suggests that since the inflow of political information immensely increases when elections are imminent, citizens tend to exhibit higher levels of political knowledge right before an election and such heightened levels of political knowledge disappear throughout the electoral cycle (Andersen, Tilley, and Heath 2005; Berggren 2001; Gordon and Segura 1997; Nicholson 2003). In a similar vein, when media outlets fail to provide accurate information about opposition parties or candidates, citizens' levels of political knowledge decrease due to this lack of information. Accordingly, what is novel in the first empirical chapter of this thesis is that I address the interactive nature of these phenomena and aim to offer a dynamic explanation for varying levels of political knowledge within and across the examined countries.

In the first empirical chapter of this thesis , I test these theories by employing data from the European Election Studies. Although EES data contain information only on the European countries, they provide a unique opportunity to investigate the interactive effects of electoral proximity and media freedom on political knowledge. Since the studies are conducted following the European Parliamentary elections, which are held every five years, countries tend to be at different stages of their national electoral cycles when EES studies are conducted, allowing for an investigation of electoral proximity's effect on political knowledge. In the absence of political knowledge batteries that would allow for cross-national and longitudinal comparisons, I operationalize political knowledge as respondents' ability to correctly place political parties on the left-right ideological spectrum following Gordon and Segura (1997). Since the accuracy of identifying parties' ideological stances is critical for not only informed voting but also for political accountability, I believe it is a both empirically and theoretically appropriate proxy for political knowledge.

The analyses in the first empirical chapter provide strong empirical support for the aforementioned theoretical expectations. As expected, media bias against opposition has a significant and negative effect on political knowledge. Furthermore, on average, individuals exhibit higher levels of political knowledge right before or after an election. What is striking is that this effect of electoral proximity is contingent on media bias. While average accuracy of identifying party positions fluctuates severely throughout the electoral cycle in countries with notable media bias against opposition, this accuracy remains stable in the remainder of the cases. Besides, the negative effect of time passed since the previous parliamentary election is observable only in countries with high levels of media bias. On the other hand, average level of political knowledge remains almost constant, if not increases, over the course of the electoral cycle in the examined countries with average or low levels of media bias.

The empirical findings in the second chapter suggest that –owing to the constant inflow of political information throughout the electoral cycles– individuals who reside in countries with free media environments exhibit almost stable levels of political knowledge. On the other hand, in countries with high levels of media bias, the masses' political knowledge

substantially fluctuates. To address the dynamics of these fluctuations and explore the ways individuals acquire political information in fragmented and censored media environments, the second empirical chapter of this thesis investigates the individual determinants of political knowledge in Turkey, a country characterized by a highly polarized and fragmented media landscape (Yanatma 2018). Media bias against the opposition in the Turkish media landscape is well documented (Çarkoğlu, Baruh, and Yıldırım 2014; Moral and Çarkoğlu 2018; Yıldırım, Baruh, and Çarkoğlu 2020). Consequently, studying the individual determinants of political knowledge in Turkey would produce valuable insights for our understanding of the variations in political knowledge in societies with similarly biased media environments.

I argue that in countries with biased media environments, individuals need to invest more in acquiring political information. Therefore, studying the factors that affect individuals' willingness to acquire information is critical for understanding the determinants of political knowledge in Turkey. Accordingly, I look into the effects of ideological distance between survey respondents' self-placement and their placement of parties, their predispositions towards the parties, and levels of affective polarization. Put simply, I argue that individuals are more motivated to acquire information about, and in turn are more accurate in identifying, the ideological stances of the parties that are ideologically closer to their views and the parties towards which they have positive feelings. Those who exhibit high levels of affective polarization are less motivated to seek information about the parties they dislike as well. Consequently, on average, individuals with polarized attitudes tend to be less accurate in their party placements.

This, I argue, is problematic from the perspective of representative democracy given the rapidly increasing polarization in several countries in last decades. As Carothers and O'Donohue (2019) argue, polarization, in terms of sharp divides between opposing political perspectives and decreasing room for compromises, has been prominent in many new and old democracies. In addition to widely studied consequences of affective polarization, such as democratic erosion (McCoy, Rahman, and Somer 2018), and dislike and distrust towards the members of the opposing political camp (Iyengar et al. 2019), this thesis demonstrates another major consequence of affective polarization, namely, decreasing levels of knowledge about political parties and their ideological stances. As voters become more polarized, they seek information about the political parties less frequently. This poses a threat against the sustainability of representative democracy, as those who do not accurately know party positions and offerings would hardly hold particular political actors accountable. Furthermore, this lack of knowledge leaves very little room for changes in partisan attachments. Put differently, even though there might be alternative parties that are ideologically closer to the views of polarized voters, since voters do not seek information about or misestimate the ideological positions of such parties, their partisan attachments are likely to remain unchanged.

I also expect the effect of ideological distance on political knowledge to be non-linear, since

polarized media environments tend to emphasize the differences between political parties more, thus, enhance voters' accuracy of identifying the positions of ideologically distant parties. Besides, I argue that the effect of ideological distance is contingent on affective polarization. Those who exhibit high levels of affective polarization push the parties they dislike away from their self-placements on the ideological scale. In other words, to conform with their negative feelings towards particular parties, polarized individuals overstate the distance between their ideological self-placement and the parties' stances. Since there is a natural limit to the extent they can push parties with notably distant ideological stances, the effect of this push becomes more pronounced for the parties with only marginally distant ideological stances.

As expected, the second empirical chapter demonstrates that Turkish citizens' attitudes towards political parties have substantial effects on their political knowledge. Parallel to my theoretical expectations, the empirical analyses suggest that Turkish voters are more accurate in identifying the ideological stances of parties that are very distant from their own ideological stands or those that are ideologically very close to their views. Furthermore, voters who strongly favor one party over the others are significantly less accurate in placing parties that have marginally distant ideological stances. Having positive attitudes towards political parties also increases the accuracy of voters' placements of corresponding parties. These are likely a consequence of partisan motivated reasoning –a well-known driver and also a consequence of high and increasing citizen polarization. Lastly, while the partisans of AKP, CHP, and HDP are less accurate in identifying their parties' ideological stances, the partisans of the Turkish nationalist MHP and IYIP place their parties more accurately compared to non-partisans.

In addition, the second empirical chapter shows that voters' media consumption patterns strongly influence their levels of political knowledge. In line with previous research (Deli Carpini and Keeter 1996; Elo and Rapeli 2010; Fraile 2011; Fraile and Iyengar 2014; Jerit, Barabas, and Bolsen 2006; Moral and Çarkoğlu 2018; Prior 2005), Turkish voters who follow newspapers more frequently are more accurate in their placements of political parties. This positive effect of following newspapers is, however, largely contingent on voters' predispositions towards parties. Newspaper readership enhances voters' accuracy of placing only the parties they "dislike." In a highly polarized media environment, Turkish voters can easily acquire information about the parties to which they feel close, mitigating the positive effect of reading newspapers. On the other hand, since newspapers still demonstrate some levels of internal pluralism concerning the parties they cover (Çarkoğlu, Baruh and Yıldırım 2014; Yıldırım, Baruh and Çarkoğlu 2020) compared to other mediums, reading newspapers also allows voters to acquire more information about the parties they "dislike."

Lastly, I find limited empirical support for the effect of TV consumption on political knowledge. The empirical analyses reveal that those who follow TV networks whose viewers predominantly support the opposition parties are more accurate in their placements of

IYIP. Since IYIP was founded in 2017, Turkish voters did not possess much information about the party in 2018. Opposition-supporting networks tend to promote IYIP and provided more information about the party especially during the election campaign (Office for Democratic Institutions and Human Rights 2018). Those who follow such TV networks could acquire more information about the party; thus, they may have more accurately identified the ideological stance of IYIP. In contrast, voters who follow opposition-oriented TV networks were less accurate in placing HDP on the ideological scale. During the 2018 election campaign, TV channels that are close to the incumbent dedicated very little airtime to HDP and its policies, and their tones were predominantly negative (Office for Democratic Institutions and Human Rights 2018). On the other hand, opposition-oriented channels covered HDP and its policies in a relatively balanced and positive way. Since HDP is a radical left party in the Turkish context (e.g., CHES place HDP on 1.67 on the conventional left-right scale), this difference in attitudes transforms into opposition-minded individuals' lower accuracies in placing HDP on the ideological scale –possibly pulling the party towards themselves (i.e., positive projection bias).

All in all, this thesis contributes to literature in several respects. The first empirical chapter presents, to the best of my knowledge, the first dynamic understanding of political knowledge from a comparative perspective. Furthermore, the interactive effects of media bias and electoral proximity had so far been unaddressed in the literature. The analyses in the first empirical chapter underline the essential role of media in providing citizens with politically relevant information throughout an electoral cycle. In countries where media bias is prevalent, voters, on average, exhibit significantly lower levels of political knowledge, which limits their ability to hold the political actors accountable. In other words, in many countries, the democratic system functions as it should only when elections are imminent.

The case study on Turkey in the second empirical chapter, a country with a highly fragmented and polarized media landscape, offers valuable insights on the determinants of political knowledge in countries with biased media environments. I demonstrate that when available information about particular parties is limited, individuals' attitudes towards and perceptions of the parties have more substantial effects on their political knowledge about those parties. More importantly, I show that the positive effect of media consumption on political knowledge is also contingent on voters' attitudes towards parties. In short, the analyses in the second empirical chapter contributes to the literature by investigating the interactions between the polarization of citizens and that of the media landscape.

It should be noted, despite its many contributions, this thesis is not without certain limitations either. First of all, I investigate only a single aspect of political knowledge –namely, knowledge about the ideological stances of political parties. Further studies should assess the validity of this thesis' empirical findings by extending the inquiry to different components of political knowledge, such as party positions on certain issues or knowledge about political institutions. Furthermore, the analyses in Chapter 2 are only limited to Europe. Since the majority of the European countries are established

democracies, country-level variances in our dependent and independent variables, political knowledge and media bias, is admittedly limited. Although such limited variances only make us reach more conservative estimates, it would be particularly interesting to test the hypotheses in a larger sample also consisting of the transitioning or emerging democracies. Furthermore, the first empirical chapter is also limited in its power to explain individual-level variance within the examined countries. Due to data availability issues, I could not address the effect of media consumption patterns on political knowledge. Further studies should investigate the political content and scope of coverage of individuals' preferred news media sources and their respective effects on political knowledge.

In addition, by design, the analyses in the second empirical chapter cannot shed light on the causal link between media polarization, media outlet preferences, and political knowledge. Panel data that track the changes in individual political knowledge as a result of media consumption patterns would help us draw more valid inferences on the causal link between political knowledge and media consumption. Admittedly, our classification of TV channels according to the party preference distributions of their viewers is also simplistic. Further studies, preferably based on comprehensive content analyses, should account for the political content of TV channels, and identify the airtimes these channels dedicate to particular parties as well as the tone they use while providing news stories about these parties. Lastly, it is also important to note that the effects of the media landscape and media consumption behavior on political behavior and public opinion formation, both in a comparative perspective and in Turkey, remains as fertile grounds for future research.

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APPENDIX A

Table A1 Summary Statistics for the Variables in Table 1

Variable	Mean	Std. Dev.	Min.	Max.	N
Political Knowledge	8.199	0.915	1.118	9.997	93875
Months Since Last Election	23.951	13.665	0.033	52.833	93875
Media Bias	2.02	0.538	-0.02	2.861	93875
Age of Democracy	59.349	39.11	5	135	93875
Education	2.292	0.715	1	3	93875
Female	0.507	0.5	0	1	93875
Age	48.845	16.904	15	99	93875
Ideology	5.18	2.617	0	10	93875
Social Class	1.795	0.691	1	3	93875
Political Interest	2.606	0.884	1	4	93875
Residency	2.012	0.808	1	3	93875
Turnout	0.859	0.348	0	1	93875

Table A2 Comparison of Temporal Proximity Variables

Variable	Mean	Std. Dev.	Min.	Max.	N
Months Since Last Election	23.951	13.665	0.033	52.833	93875
Proximity	0.515	0.28	0.001	1	93875

Figure A1 Linear Predictions of *Political Knowledge* as Conditional on *Months Since the Last Election* and *Media Bias* without Media Consumption Variables Based on Model 1 in Table 2

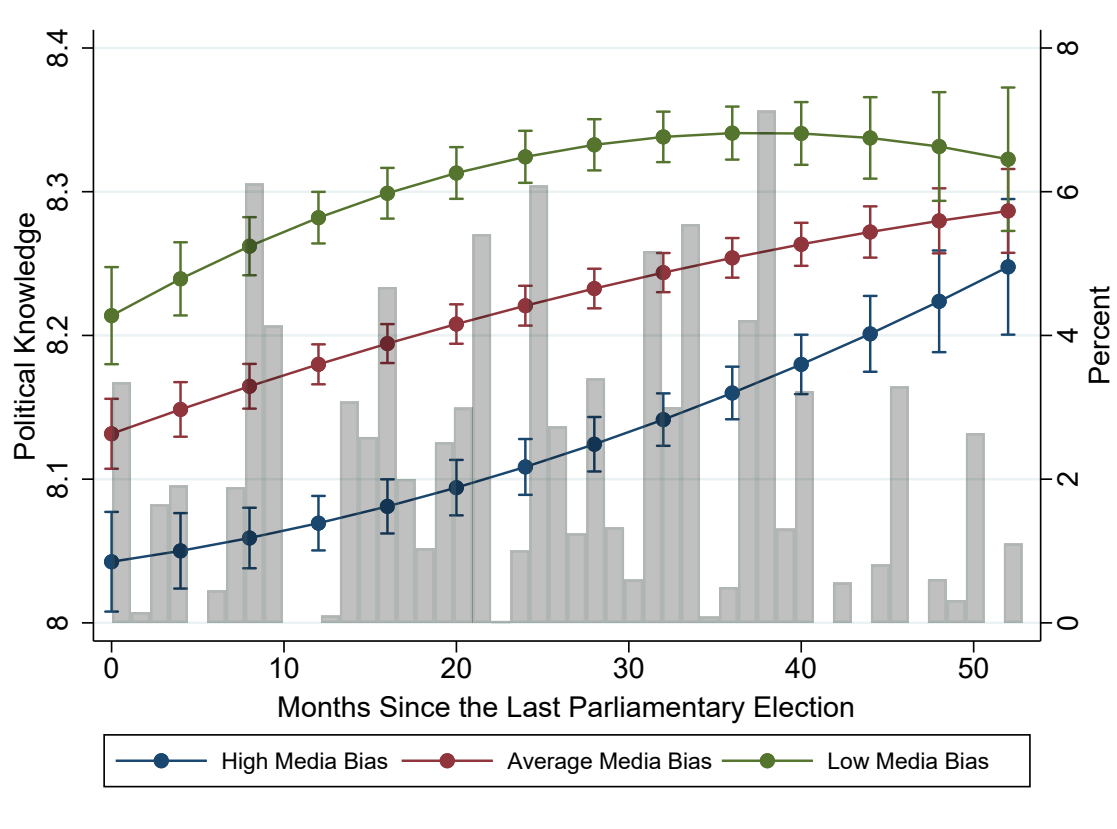


Figure A1 suggests that there is very little empirical evidence suggesting that the underlying reason behind the different patterns in Figure 1 and Figure 2 is the introduction of media consumption variables rather than the availability of 1994 and 2019 modules.

Table A3 Logistic Regression Estimates on Correctly Ordering Two Largest Parties w/ Media Consumption Variables

	Base Model	Model.1	Model.2
Proximity	1.6254**	1.5439**	1.5651**
	(0.7566)	(0.7573)	(0.7569)
Proximity^2	-0.6999	-0.6311	-0.6723
	(0.7354)	(0.7350)	(0.7347)
Media Bias	0.4229***	0.4035***	0.4118***
	(0.0779)	(0.0783)	(0.0780)
Proximity × Media Bias	-0.7396**	-0.6866*	-0.7292**
	(0.3581)	(0.3586)	(0.3581)
Proximity^2 × Media Bias	0.4386	0.3982	0.4507
	(0.3495)	(0.3494)	(0.3492)
Party Distance	0.5252***	0.5249***	0.5248***
	(0.0101)	(0.0101)	(0.0101)
Age of Democracy	0.0002	0.0001	0.0000
	(0.0003)	(0.0003)	(0.0003)
Education	0.1998***	0.1958***	0.1967***
	(0.0190)	(0.0190)	(0.0191)
Female	-0.0581**	-0.0525**	-0.0552**
	(0.0249)	(0.0249)	(0.0249)
Age	0.0058***	0.0056***	0.0056***
	(0.0008)	(0.0008)	(0.0008)
Ideology	-0.0073	-0.0072	-0.0069
	(0.0047)	(0.0047)	(0.0047)
Subjective Social Class	0.1656***	0.1604***	0.1648***
	(0.0194)	(0.0195)	(0.0195)
Political Interest	0.1962***	0.1901***	0.2031***
	(0.0148)	(0.0150)	(0.0161)
Residency	0.0104	0.0101	0.0106
	(0.0154)	(0.0154)	(0.0154)
Turnout	0.3728***	0.3685***	0.3765***
	(0.0333)	(0.0333)	(0.0334)
Year	-0.0138***	-0.0136***	-0.0116***
	(0.0025)	(0.0025)	(0.0026)
Standardized TV News		-0.0111	
		(0.0131)	
Standardized Newspapers		0.0459***	
		(0.0134)	
Follow EE (TV)			-0.0840***
			(0.0200)
Follow EE (Newspapers)			0.0823***
			(0.0192)
Follow EE (Web)			-0.0482**
			(0.0228)
Constant	24.6458***	24.4189***	20.3038***
	(4.9782)	(4.9971)	(5.2580)
N	45935	45935	45935
Log-Likelihood	-20791.71	-20785.81	-20775.41
AIC	41617.42	41609.62	41590.83
BIC	41765.92	41775.59	41765.53

Standard errors in parentheses.

Model.2 contains standardized media consumption variables.

Model.3 contains EE-related news consumption variables.

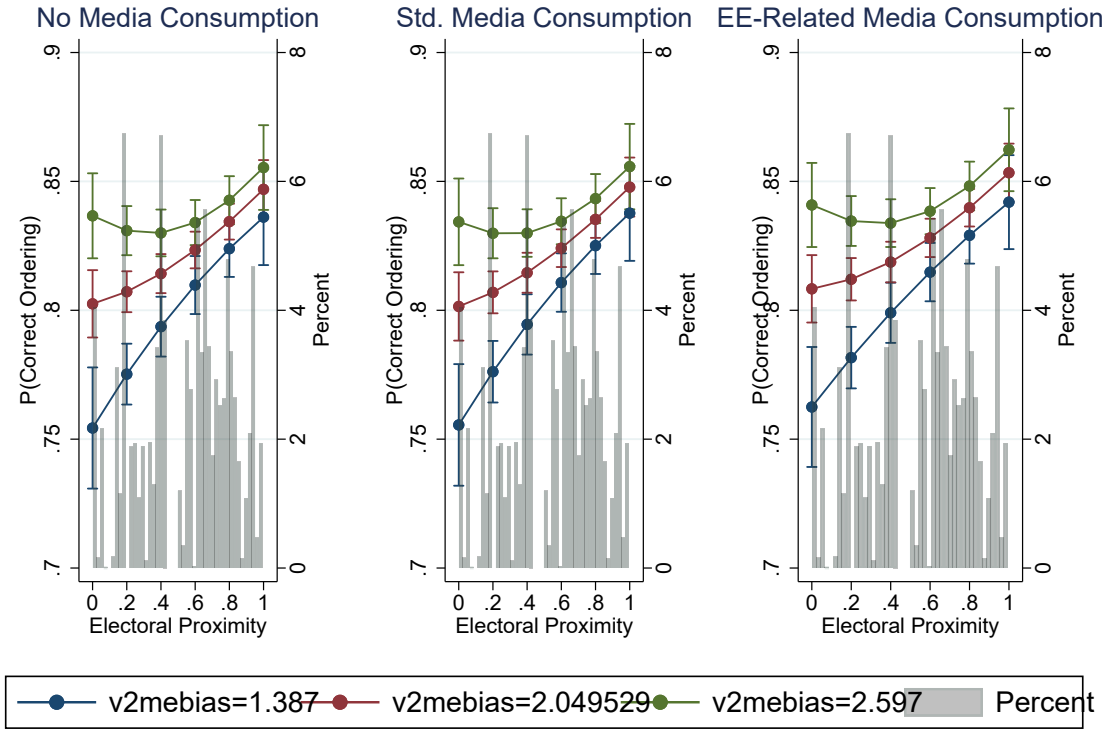
Includes 1999, 2004, 2009 and 2014 modules.

* p<0.1, ** p<0.05, *** p<0.01, two tailed tests.

To assess the effect of media consumption variables, I run logistic regression estimates on *Alternative Political Knowledge*, and Table A3 reports the logistic regression estimates on correctly placing the two largest political parties on the ideological spectrum with the media consumption variables. A series of likelihood-ratio tests suggest that the introduction of standardized news consumption variables, as well as the EE-related news consumption variables significantly increase the explanatory power of the base model. The effective sample size decreases to 45935 in Table A3, as the media consumption variables are available only for the 1999, 2004, 2009, and 2014 EES modules.

The coefficients associated with the squared *Proximity* are not distinguishable from zero, which indicates the non-linear effect of electoral proximity on political knowledge disappears due to the reduced number of available EES modules. Similarly, the coefficients associated with the interaction term consisting of the squared *Proximity* and *Media Bias* are not statistically distinguishable from zero in contrast to the models in Table 3. When the standardized media consumption variables are introduced, it appears that only *Standardized Newspaper Consumption* has a significant effect on correctly ordering parties. A unit of increase in newspaper consumption results in a .05 increase in the probability of providing the correct sorting. When the EE-related news consumption is employed as a proxy for media consumption, it appears that while those who “sometimes" follow news on European Parliament elections on newspapers are on average .08 more likely to provide the correct ordering compared to those who “never" read the news on this issue; those who “sometimes" follow TV news and Web-sources are .08 and .05 less likely to correctly order the parties compared to those who “never" do so, respectively. Since the exclusion of 1994 and 2019 modules appears to be the underlying reason behind the changes in observed patterns of political knowledge, as it was the case in Figure 2, the figures plotting the predicted probabilities of correct ordering, based on Table A3, as conditional on *Proximity* and *Media Bias* are provided in Figure A2.

Figure A2 Predicted Probabilities of Correct Placement as Conditional on *Proximity* and *Media Bias* with Media Consumption Variables



Includes modules 1999, 2004, 2009, 2014.

APPENDIX B

Table B1 Summary statistics for Tables 1 & 2

Variable	Mean	Std. Dev.	Min.	Max.	N
Political Knowledge (CHES Placement)	7.94	1.602	0.667	10	10442
Political Knowledge (Mean Placement)	8.332	1.372	1.477	9.976	10442
Ideological Distance (CHES Placement)	3.236	2.337	0	9.333	10442
Ideological Distance (Mean Placement)	3.522	2.486	0.024	8.523	10442
Affective Polarization	6.483	2.511	0	10	10442
# of Days After Election	54.826	14.087	29	95	10442
Like/Dislike Party	3.468	3.545	0	10	10442
Partisanship	0.191	0.393	0	1	10442
# of Parties not Placed by *R*	0.144	0.429	0	4	10442
Age	38.789	15.256	15	90	10442
Urban Residency	2.896	1.095	1	4	10442
Education	0.067	0.985	-1.695	3.219	10442
Female	0.511	0.5	0	1	10442
2015 Dummy	0.332	0.471	0	1	10442
2018 Dummy	0.379	0.485	0	1	10442

Figure B1 Linear Predictions of *Political Knowledge* as Conditional on *Ideological Distance* and *Affective Polarization* (Mean Placements)

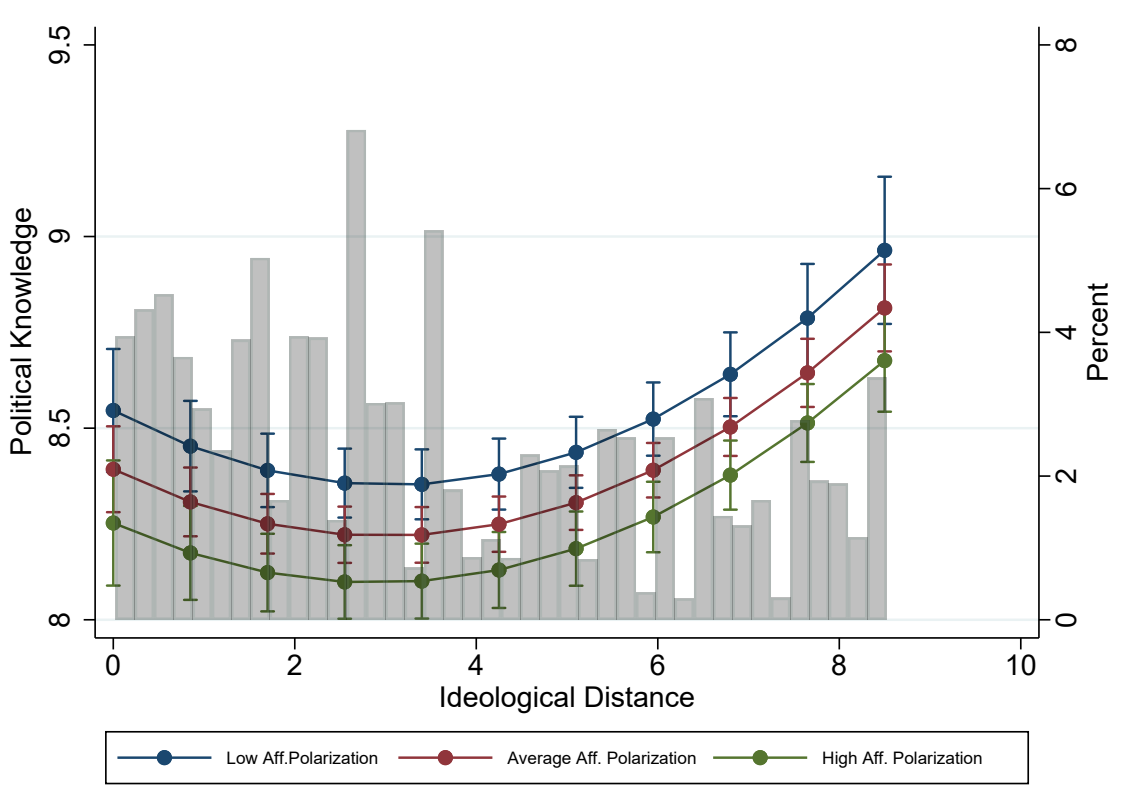


Figure B2 Average Marginal Effects of Partisanship on Political Knowledge as Conditional on Political Parties (Mean Placements)

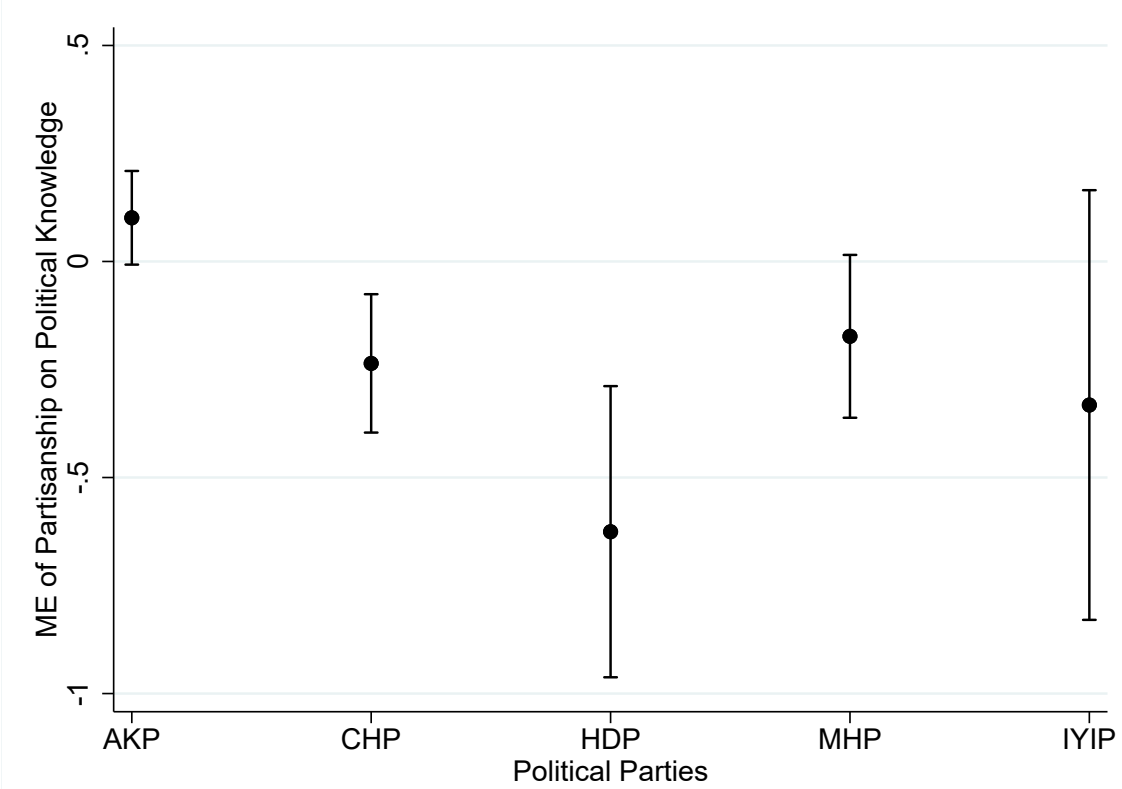


Table B2 OLS Regression Estimates on Average Accuracy of Identifying Party Positions Controlling for Partisanship

	Base Model	Model 1	Model 2
Ideological Distance	-0.1362**	-0.2106***	-0.2115***
	(0.0639)	(0.0646)	(0.0645)
Ideological Distance^2	0.0218***	0.0268***	0.0267***
	(0.0074)	(0.0075)	(0.0075)
Affective Polarization	-0.0441**	-0.0514***	-0.0541***
	(0.0179)	(0.0181)	(0.0180)
I.Distance × Affective Polarization	0.0030	0.0118	0.0125
	(0.0094)	(0.0094)	(0.0094)
I.Distance^2 × Affective Polarization	-0.0003	-0.0013	-0.0014
	(0.0011)	(0.0011)	(0.0011)
# of Days After Election	-0.0002	-0.0001	-0.0002
	(0.0017)	(0.0017)	(0.0017)
Like/Dislike Party	0.0397***	0.0381***	0.0398***
	(0.0060)	(0.0062)	(0.0062)
Partisanship	0.0441	-0.1106**	0.1011*
	(0.0449)	(0.0463)	(0.0553)
CHP Dummy		0.1063***	0.2270***
		(0.0304)	(0.0449)
HDP Dummy		-0.0311	0.1009**
		(0.0395)	(0.0501)
MHP Dummy		-0.3264***	-0.2257***
		(0.0353)	(0.0419)
IYIP Dummy		-0.5597***	-0.4498***
		(0.0670)	(0.0733)
CHP Dummy × Partisanship			-0.3370***
			(0.0933)
HDP Dummy × Partisanship			-0.7265***
			(0.1802)
MHP Dummy × Partisanship			-0.2743***
			(0.1017)
IYIP Dummy × Partisanship			-0.4333*
			(0.2570)
# of Parties not Placed by R	0.0652**	0.0563*	0.0627*
	(0.0322)	(0.0328)	(0.0329)
Age	0.0018	0.0018	0.0018
	(0.0012)	(0.0012)	(0.0012)
Urban Residency	0.0315*	0.0317**	0.0328**
	(0.0161)	(0.0160)	(0.0159)
Education	0.0120	0.0119	0.0158
	(0.0189)	(0.0188)	(0.0188)
Female	0.0231	0.0211	0.0112
	(0.0342)	(0.0341)	(0.0341)
2015 Dummy	-0.0406	-0.0367	-0.0224
	(0.0472)	(0.0470)	(0.0468)
2018 Dummy	-0.1735***	-0.0818*	-0.0836**
	(0.0416)	(0.0428)	(0.0426)
Constant	8.4293***	8.6539***	8.5704***
	(0.1692)	(0.1720)	(0.1729)
N	10442	10442	10442
R^2	0.0242	0.0418	0.0454

* p<0.1, ** p<0.05, *** p<0.01, two tailed tests.

True party stances are calculated as the mean placements.

Robust standard errors clustered by respondents in parentheses.

Base category for political party dummies is the AKP.

Table B3 OLS Regression Estimates on Average Accuracy of Identifying Party Positions Controlling for Media and Interest Variables

	Base Model	Model 1	Model 2	Model 3
Ideological Distance	-0.1744***	-0.0075	-0.0021	-0.0076
	(0.0357)	(0.0938)	(0.0939)	(0.0935)
Ideological Distance^2	0.0263***	0.0031	0.0023	0.0023
	(0.0043)	(0.0110)	(0.0110)	(0.0110)
Affective Polarization	-0.0400***	-0.0101	-0.0111	-0.0135
	(0.0146)	(0.0287)	(0.0285)	(0.0284)
I.Distance × Affective Polarization		-0.0273*	-0.0282*	-0.0270*
		(0.0155)	(0.0155)	(0.0155)
I.Distance^2 × Affective Polarization		0.0037**	0.0039**	0.0038**
		(0.0017)	(0.0017)	(0.0017)
Following TV			0.0217	0.0227
			(0.0253)	(0.0252)
Following Newspaper			0.0099	0.0313*
			(0.0140)	(0.0173)
Following the Web			-0.0130	-0.0131
			(0.0129)	(0.0129)
Like/Dislike Party	0.0443***	0.0442***	0.0437***	0.0660***
	(0.0102)	(0.0105)	(0.0104)	(0.0138)
Like/Dislike Party × Following Newspaper				-0.0062***
				(0.0022)
# of Days After Election	0.0029	0.0029	0.0030	0.0030
	(0.0026)	(0.0026)	(0.0026)	(0.0026)
Partisanship	0.1056	0.1051	0.1088	0.1094
	(0.0674)	(0.0675)	(0.0674)	(0.0671)
# of Parties not Placed by R	-0.0130	-0.0153	-0.0149	-0.0153
	(0.0587)	(0.0587)	(0.0584)	(0.0585)
Political Interest	0.0240	0.0232	0.0236	0.0239
	(0.0449)	(0.0450)	(0.0458)	(0.0457)
Degree of Following the Elections	-0.0765	-0.0750	-0.0799	-0.0792
	(0.0507)	(0.0508)	(0.0503)	(0.0503)
Age	0.0035	0.0035	0.0026	0.0026
	(0.0022)	(0.0022)	(0.0023)	(0.0023)
Urban Residency	0.0221	0.0232	0.0241	0.0236
	(0.0289)	(0.0289)	(0.0291)	(0.0291)
Education	0.0230	0.0235	0.0257	0.0260
	(0.0171)	(0.0171)	(0.0181)	(0.0181)
Female	-0.1069*	-0.1094*	-0.1051*	-0.1027*
	(0.0591)	(0.0593)	(0.0591)	(0.0592)
Constant	8.2274***	8.0384***	7.9497***	7.8761***
	(0.2518)	(0.2915)	(0.3305)	(0.3329)
N	3944	3944	3944	3944
R^2	0.0302	0.0313	0.0322	0.0337

* p<0.1, ** p<0.05, *** p<0.01, two tailed tests.

True party stances are calculated as the mean placements.

Robust standard errors clustered by respondents in parentheses.

Figure B3 Average Marginal Effects of *Following Newspapers* as Conditional on *Like/Dislike Party* (Mean Placements)

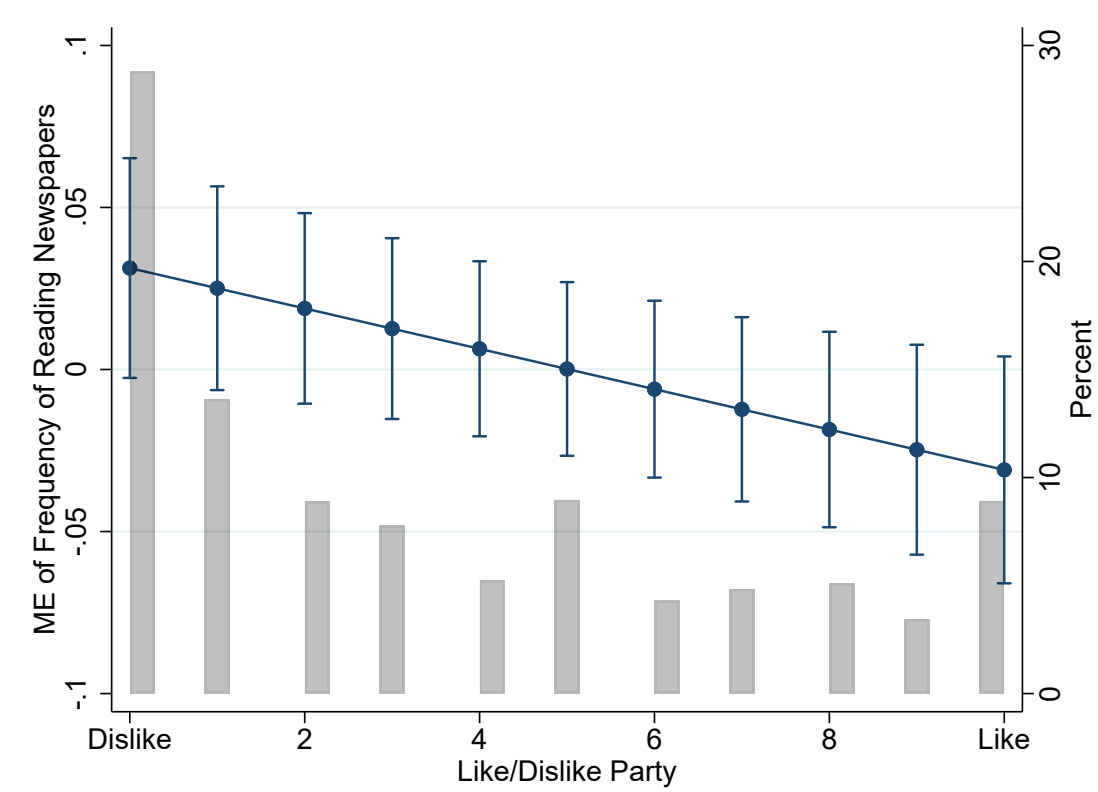


Table B4 Categorization of TV Channels

Channel	Category	Factor Score
CNN Türk	Opposition	2.09
FOX TV	Opposition	1.63
Halk TV	Opposition	1.38
NTV	Mainstream	.84
Kanal D	Mainstream	.08
Show TV	Mainstream	-.17
TRT Haber	Incumbent	-.28
Ülke TV	Incumbent	-.33
TRT1	Incumbent	-.48
Star TV	Incumbent	-.55
TGRT Haber	Incumbent	-.68
Flash TV	Incumbent	-.75
A Haber	Incumbent	-.85
ATV	Incumbent	-.93
Kanal 7	Incumbent	-.98

Table B5 OLS Regression Estimates on Average Accuracy of Identifying Party Positions Controlling for Media, Interest, TV Network Preference and Party Variables

	Base	Model 1	Model 2
Ideological Distance	-0.0139	-0.0103	-0.1690*
	(0.0965)	(0.0965)	(0.0968)
Ideological Distance^2	0.0039	0.0033	0.0152
	(0.0114)	(0.0114)	(0.0115)
Affective Polarization	-0.0173	-0.0188	-0.0423
	(0.0289)	(0.0291)	(0.0293)
I.Distance × Affective Polarization	-0.0229	-0.0233	0.0028
	(0.0159)	(0.0159)	(0.0161)
I.Distance^2 × Affective Polarization	0.0032*	0.0033*	0.0002
	(0.0018)	(0.0018)	(0.0018)
# of Days After Election	0.0027	0.0028	0.0036
	(0.0027)	(0.0027)	(0.0027)
Like/Dislike Party	0.0621***	0.0613***	0.0567***
	(0.0141)	(0.0141)	(0.0156)
Following Newspaper	0.0202	0.0221	0.0177
	(0.0174)	(0.0177)	(0.0176)
Like/Dislike Party × Following Newspaper	-0.0051**	-0.0052**	-0.0038*
	(0.0022)	(0.0022)	(0.0022)
Following Incumbent-Supporting Networks		0.0265	0.0047
		(0.0864)	(0.1118)
Following Opposition-Supporting Networks		-0.0368	0.0089
		(0.0941)	(0.1451)
CHP Dummy			-0.0770
			(0.1076)
HDP Dummy			0.1256
			(0.1670)
MHP Dummy			-0.5819***
			(0.1577)
IYIP Dummy			-0.7274***
			(0.1683)
CHP Dummy × Incumbent-Supporting Networks			0.0361
			(0.1257)
CHP Dummy × Opposition-Supporting Networks			-0.2986*
			(0.1612)
HDP Dummy × Incumbent-Supporting Networks			0.0415
			(0.1689)
HDP Dummy × Opposition-Supporting Networks			-0.2813
			(0.2121)
MHP Dummy × Incumbent-Supporting Networks			0.1592
			(0.1718)
MHP Dummy × Opposition-Supporting Networks			0.2162
			(0.1788)
IYIP Dummy × Incumbent-Supporting Networks			-0.0159
			(0.1966)
IYIP Dummy × Opposition-Supporting Networks			0.1610
			(0.2130)
# of Parties not Placed by R	-0.0454	-0.0434	-0.0517
	(0.0647)	(0.0646)	(0.0667)
Partisanship	0.1139*	0.1174*	-0.1222
	(0.0688)	(0.0685)	(0.0805)
Following TV	0.0196	0.0188	0.0217
	(0.0505)	(0.0506)	(0.0504)
Following the Web	-0.0015	-0.0016	-0.0005
	(0.0130)	(0.0129)	(0.0129)
Political Interest	0.0299	0.0338	0.0320
	(0.0480)	(0.0482)	(0.0477)
Degree of Following the Elections	-0.0843	-0.0853	-0.0776
	(0.0536)	(0.0538)	(0.0535)
Age	0.0035	0.0036	0.0035
	(0.0024)	(0.0024)	(0.0024)
Urban Residency	0.0079	0.0104	0.0125
	(0.0303)	(0.0300)	(0.0297)
Education	0.0222	0.0238	0.0231
	(0.0185)	(0.0188)	(0.0187)
Female	-0.1216**	-0.1184**	-0.1175**
	(0.0600)	(0.0593)	(0.0590)
Constant	7.9565***	7.9367***	8.4250***
	(0.4279)	(0.4344)	(0.4459)
N	3610	3610	3610
R^2	0.0321	0.0324	0.0637

* p<0.1, ** p<0.05, *** p<0.01, two tailed tests.

True party stances are calculated as the mean placements.

Robust standard errors clustered by respondents in parentheses.

Base category for TV channel preferences is following mainstream channels and for political party dummies is AKP

Table B6 Summary statistics for Table 3

Variable	Mean	Std. Dev.	Min.	Max.	N
Political Knowledge (Expert Placements)	8.050	1.663	0.667	10	3944
Political Knowledge (Mean Placements)	8.249	1.429	1.507	9.712	3944
Ideological Distance (Expert Placements)	3.316	2.401	0	9.333	3944
Ideological Distance (Mean Placements)	3.415	2.413	0.288	8.493	3944
Affective Polarization	5.938	2.257	0	10	3944
# of Days After Election	46.61	11.3	29	77	3944
Like/Dislike Party	3.417	3.395	0	10	3944
Following Newspapers	3.767	2.602	1	7	3944
Partisanship	0.163	0.369	0	1	3944
# of Parties not Placed by R	0.134	0.417	0	4	3944
Age	36.88	14.57	15	78	3944
Urban Residency	3.092	1.015	1	4	3944
Education	3.783	1.899	1	8	3944
Female	0.538	0.499	0	1	3944
Following TV	6.484	1.327	1	7	3944
Following the Web	4.23	2.817	1	7	3944
Political Interest	2.557	0.96	1	4	3944
Degree of Following the Elections	2.562	0.919	1	4	3944

Table B7 Summary statistics for Table 4

Variable	Mean	Std. Dev.	Min.	Max.	N
Political Knowledge (Expert Placements)	8.065	1.647	0.667	10	3610
Political Knowledge (Mean Placements)	8.269	1.408	1.507	9.712	3610
Ideological Distance (Expert Placements)	3.3	2.396	0	9.333	3610
Ideological Distance (Mean Placements)	3.409	2.413	0.288	8.493	3610
Affective Polarization	6.007	2.197	0	10	3610
# of Days After Election	46.434	11.247	29	77	3610
Like/Dislike Party	3.455	3.412	0	10	3610
Following Newspapers	3.742	2.593	1	7	3610
Partisanship	0.165	0.371	0	1	3610
# of Parties not Placed by R	0.127	0.405	0	4	3610
Age	37.256	14.656	15	78	3610
Urban Residency	3.102	1.016	1	4	3610
Education	3.734	1.873	1	8	3610
Female	0.542	0.498	0	1	3610
Following TV	6.712	0.755	2	7	3610
Following the Web	4.196	2.816	1	7	3610
Political Interest	2.557	0.956	1	4	3610
Degree of Following the Elections	2.567	0.918	1	4	3610
TV Channel Preferences	0.88	0.891	0	2	3610

Figure B4 Average Marginal Effects of TV Network Preferences on Political Knowledge as Conditional on Political Parties (Mean Placements)