Proximity or Directional Model of Voting for the Turkish Voter?

Türk Seçmeni için Yakınlık veya Yön Oy Verme Modeli?

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Abstract

Voting behavior is a very complex type of political behavior. Therefore, understanding why voters vote for a particular political party or a candidate requires developing complex models. In 1957, Anthony Downs, who built his model on Hottelings' and Smithies' models, argued that political parties' and candidates' ideological and issue positions can be expressed on a one-dimensional space. On one hand, it was highly reductionist to argue that political ideas on a particular issue can be expressed this way, on the other, it was highly practical from analytical point of view. Locating parties, candidates and voters on a one-dimensional space according to their ideological or issue positions was then a revolutionaly idea and helped comparing party, candidate and voter ideological and issue positions within and across countries. These models, which were called spatial models of party competition were further developed over time and helped understanding voting behavior. Currently, spatial models of party competition have two major competing models linking voter ideological positions with party ideological positions. Simply, while the proximity model proposes that voters vote for the parties or candidates that hold ideological positions in the political space that are closest to their own, the directional model suggests that the voters vote for the parties or candidates that are on their side of the two-dimensional political spectrum and more extreme than their own while being within the acceptability region. This research aims to test the applicability of these two voting models for the Turkish voter. Türkiye constitutes an interesting case study with its long-term PR electoral system as it was suggested in the extant literature that proximity model is a more appropriate tool to explain voting behavior in Proportional (PR) systems. Thus, we hypothesize that in Türkiye, where a PR electoral system is in effect for parliamentary elections, voter electoral preferences are better explained by the proximity model than the directional model. Our research analyzes Comparative Study of Electoral Systems (CSES) data for voters of the four major political parties in Türkiye, the Justice and Development Party (JDP), the Republican People's Party (RPP), the National Action Party (NAP), and the People's Democratic Party (PDP). A series of Multiple Linear Regression Analyses were conducted to reveal associations between the dependent and the independent variables. Voter embracement, as expressed as like-dislike of each political party for each voter, is seperately used as the dependent variable for each analysis. Issue distance and issue scalar product were used as key independent variables representing the formulas for the proximity and the directional models, respectively. Additionally, education, age, gender and income were recruited as classical control variables. Comparing explanatory powers of the statistical models showed that, contrary to the findings of MacDonald and his colleagues, the proximity model of voting is a more appropriate tool than the directional model to explain voting behavior in Türkiye. From a macro-political perspective, this finding supports Westholm's (1997) argument that the PR provides a more appropriate tool to explain voting behavior in PR systems. Yet, it should be noted that further multi-country comperative analyses required for certain results.

Keywords: Spatial Theories of Party Competition, Proximity Model, Directional Model, Voting Behavior, Turkish Politics

Türk Seçmeni için Yakınlık veya Yön Oy Verme Modeli?

Öz

Oy verme davranışı oldukça karmaşık bir politik davranış türüdür. Bu nedenle seçmenlerin belirli bir politik parti ya da adaya neden oy verdiklerini anlamak karmaşık modeller geliştirmeyi gerektirir. 1957 yılında, Modelini Hottelings ve Smithies'in modelleri üzerine kuran Anthony Downs, siyasi partilerin ve adayların ideolojik ve meseleler üzerindeki konumlarının tek boyutlu bir alanda ifade edilebileceğini savunmuştur. Belirli bir konudaki politik fikirlerin bu şekilde ifade edilebileceğini ileri sürmek bir yandan son derece indirgemeciyken, diğer yandan ise analitik açıdan son derece pratikti. Partileri, adayları ve seçmenleri konumlarına göre tek boyutlu bir alana yerleştirmek zamanı için devrim niteliğinde bir fikirdi ve parti, aday ve seçmenlerin ideolojik ve meseleler üzerindeki konumlarının her bir ülke içinde veya ülkeler arasında karşılaştırılmasına yardımcı olmuştur. Parti rekabetinin uzamsal modelleri olarak adlandırılan bu modeller zaman içinde daha da geliştirilmiş ve oy verme davranışını anlamayı kolaylaştırmıştır. Halihazırda parti rekabetinin uzamsal modelleri seçmenlerin ideolojik konumlarını parti ideolojik konumlarıyla ilişkilendiren iki başlıca rakip modele sahiptir. Basitçe, yakınlık modeli, seçmenlerin siyasi alanda kendilerine en yakın ideolojik pozisyona sahip parti veya adaylara oy vereceklerini önerirken, yön modeli ise seçmenlerin ideolojik yelpazenin kendi tarafında fakat kendilerinden daha uç noktada ancak belirli bir kabul edilebilirlik bölgesi içerisinde bulunan parti veya adaylara oy vereceklerini önermektedir. Bu araştırma, bu iki oy verme modelinin Türk seçmeni için uygulanabilirliğini test etmeyi amaçlamaktadır. Mevcut literatürde Nispi Temsil Sistemlerinde (NTS) yakınlık modelinin oy verme davranışını açıklamak için daha uygun bir araç olduğunun önerilmesinden ötürü, Türkiye uzun süredir kullandığı NTS seçim sistemiyle ilginç bir örnek teşkil etmektedir. Bu gerekçeyle, NTS'nin geçerli seçim sistemi olarak kullanıldığı Türkiye'de seçmen davranışının yön modelinden çok yakınlık modeli ile açıklanacağını önermekteyiz. Araştırmamız Türkiye'deki dört büyük siyasi

partinin, Adalet ve Kalkınma Partisi (AKP), Cumhuriyet Halk Partisi (CHP), Milliyetçi Hareket Partisi (MHP) ve Halkların Demokrasi Partisi (HDP), seçmenlerine ilişkin Karşılaştırmalı Seçim Sistemleri Araştırması (CSES) verilerini analiz etmektedir. Bağımlı ve bağımsız değişkenler arasındaki ilişkileri ortaya çıkarmak için bir dizi Çoklu Doğrusal Regresyon Analizleri yapılmıştır. Her bir seçmen için her bir siyasi partinin partiyi sevme-sevmeme şeklinde ifade edilen parti kabulü, her analizde bağımlı değişken olarak ayrı ayrı kullanılmıştır. Konu mesafesi ve konu skaler çarpımı, sırasıyla yakınlık ve yön modelleri için formülleri temsil eden temel bağımsız değişkenler olarak kullanılmıştır. Ayrıca eğitim, yaş, cinsiyet ve gelir de klasik kontrol değişkenleri olarak alınmıştır. İstatistiki modellerin açıklama güçlerinin karşılaştırması, MacDonald ve meslektaşlarının bulgularının aksine, Türkiye'de oy verme davranışını açıklamada yakınlık modelinin yön modelinden daha uygun bir araç olduğunu göstermiştir. Makro-politik bir bakış açısıyla bakıldığında bu bulgu, Westholm'un (1997) NTS'lerinde yakınlık modelinin oy verme davranışını açıklamada daha uygun bir araç olduğu önerisini doğrulamaktadır. Ancak ifade edilmelidir ki, kesin sonuçlar için çok ülkeli karşılaştırmalı analizlere ihtiyaç bulunmaktadır.

Anahtar Kelimeler: Parti Rekabetinin Uzamsal Teorileri, Yakınlık Modeli, Yön Modeli, Oy Verme Davranışı, Türk Siyaseti.

Introduction

In modern democracies, representativeness is perhaps the most important distinguishing feature of governments. Congruence between representatives and voters is an indicator of good representation. The spatial theories of party competition introduced several models of representation to understand congruence. Two models are outstanding: the proximity model and the directional model. The first generation of researchers in this line of research suggested measuring the Euclidian distance between parties and their voters. The proximity model, otherwise known as the standard Downsian model of spatial party competition, suggests that political parties, candidates, and voters can be located on a continuum representing a uni-dimensional issue space. According to the model, the smaller the distance between the voters and the voted, the greater the congruence (Downs, 1957). Some second-generation researchers in the field challenged the proximity model and proposed the superiority of the directional model. According to MacDonald and his colleagues, voters vote for parties or candidates on their side of the political spectrum that are more extremist than themselves but do not fall beyond an 'acceptability region'. Many recent studies have argued that the directional model is more powerful than the proximity model in explaining voter behavior (Rabinowitz and MacDonald, 1989; MacDonald et al., 1991; 1995; 1998; 2001). Some other researchers attempted to further elaborate the directional model. Westholm (1997) conditioned the explanatory power of each model to the type of electoral system in a country. Westholm's basic argument was that proximity is a better explanatory tool for proportional representation (PR) electoral systems.

Based on these arguments, our research attempts to test the reliability of the conditioning of Westholm's assumption by testing the validity of both the proximity and the directional models in Türkiye, where a proportional representation electoral system has been in force since 1960. In order to test the basic hypothesis suggesting that voters' electoral preferences are better explained by the proximity model than the directional model in proportional electoral systems, we use the individual-level data of the Comparative Study of Electoral Systems (CSES) for Türkiye for the year 2015 for four political parties, namely the Justice and Development Party (JDP), the Republican People's Party (RPP), the National Action Party (NAP), and the People's Democratic Party (PDP). These parties are those which are effective in the Turkish political landscape and represented in the parliament. For this purpose, we first introduce our theoretical framework based on the existing literature. Then, we turn to explain the data and the methodology used in our research. In the findings section, we interpret the results of a series of multiple linear regression analyses and decide whether the explanatory power of the proximity or the directional model is higher. In the final section, we discuss the findings and link them with the extant theory.

1. Spatial Theories of Party Competition: Proximity or Directional?

In his 1957 pioneering work, Downs was the first researcher to incorporate the spatial model into voting behavior. Yet, the importance given to party and voter positions in understanding electoral choice gained popularity not before the late 1980's in a political environment of decreasing party identification among the electorate, especially in Western democratic countries. Since then, two competing models, both classified within the rational choice tradition, have been suggested in order to match evaluation of parties or candidates with issue positions of the voters. One model argues that parties or candidates should position themselves as close as possible to the median voter; the other model suggests that parties or candidates should hold even more extreme positions than the voters. The first is the familiar proximity-based spatial model (Downs, 1957; Hinich and Pollard, 1981; Enelow and Hinich, 1984; Hinich and Munger, 1994) while the second is the directional model of electoral choice (MacDonald et al., 1991; MacDonald et al., 1995; 1998; 2001).

In his proximity model, Downs analyzes the electoral choice of utility-maximizing individuals on a single-issue space in an environment of perfect information. Voters and political parties position themselves in this single-issue space. The voters' voting decision is based on voter utility, which is calculated as the distance between their and the parties' positions (Downs, 1957; Hinich and Pollard, 1981; Enelow and Hinich, 1984; Hinich and Munger, 1994; MacDonalds et al., 1995; Adams and Merill, 1999; Çarkoğlu and Hinich, 2006; Arıkan Akdağ, 2016). The party closest to the voters gains their support. As such, the political parties position themselves according to the distribution of the voters on the issue space, mostly the closest possible to the median voter.

Since then, a large number of scholars have extended the proximity model or criticized the Downsian assumption that proximity matters in voting decisions. Among the ones who extended it, the most known are Hinich and Pollard (1981), Enelow and Hinich (1982, 1984), Hinich and Munger (1994, 2006), and Çarkoğlu and Hinich (2006). According to these scholars, competition between political parties does not take place on a single-issue dimension but on multiple issues. This makes acquiring information on the political parties' positions costlier for voters. At this point, ideology helps reduce the costs of making decisions on every issue and provides an overall understanding of voter issue positions. Thus, voters vote for the party that is closest to their ideological position.

The directional model also bases itself on the basic proximity argument that policy positions matter and voters' electoral decisions are shaped by utility calculations. The models differ the most fundamentally in how political issues are conceptualized. In the proximity model, voters are assumed to have specific policy preferences on issues. Whereas, in the directional model, voters are assumed to have only diffuse preferences for the sides of issue debates (MacDonald, Rabinowitz and Listhaug, 1998; Adams and Merill, 1999). As a result, the calculation of utility is significantly different for each model since, according to the directional model, the voters do not vote for the parties that are spatially the closest but for the parties that are on their side of the two-dimensional policy spectrum, more extreme than their own position while being within an acceptability region (MacDonald et al., 1991; MacDonald et al., 1995; Torben Iversen, 1994; Kedar, 2005). In directional theory, the impact of any issue on evaluation is the product of the voter's position and the party's position on the issue. "1: If the individual and the party are on the same side of the issue, the product will be positive, and the issue will stimulate positive feelings towards the party. If they are on opposite sides, the product will be negative, and negative feelings will be stimulated. 2: The more intense the party or the voter, the larger the effect will be" (MacDonald et al., 1995, p.457). Yet, the intensity has a certain threshold: the party is not expected to be so intense about a particular policy direction that it gives the impression that it could not operate effectively in government. So the party should be positioned in the extreme direction of the voter but within the voters' accessibility region to gain support. The authors find empirical evidence in

favor of directional voting in Norway and in the United States (MacDonald et al., 1991; MacDonald et al., 1995; 1998; 2001; Adams and Merill, 1999).

Other studies indicate that the explanatory power of each model is not uniform but is conditional on the type of electoral system, the election, and the voters' sophistication. Although MacDonald et al. (1991) indicate the superiority of the directional model for both majoritarian and PR electoral systems, other studies find conflicting results (Westholm 1997; Lewis and King 1999; Meyer and Müller 2014). Westholm (1997) suggests that proximity voting is a better explanatory tool for proportional electoral systems, while the directional model suits majoritarian electoral systems better. With the same data but a revised measurement of each theory, he retests the hypothesis of the authors with the 1989 Norwegian elections, a country with a proportional electoral system, and finds support for his argument. The effect of the electoral system on the voters' evaluation of candidate positions has also been tested by several other studies (Ames, 1995; Cox, 1990), and all have found evidence for the superiority of proximity voting in proportional electoral systems. In their study of Canadian elections in 1997, Blais et al. (2001) found similar results supporting the proximity model, even if the Canadian electoral system is majoritarian. Thus, the existing studies revealed mixed results favoring both models, making it difficult to evaluate the superiority of either model.

2. Data and Methods

Our study aims to test the explanatory power of both the proximity and directional models in explaining the electoral preferences of Turkish voters. In Türkiye, since parliamentary seats are distributed through proportional representation, we expect the proximity model to have more explanatory power in determining the Turkish voters electoral preferences. As such, the hypothesis tested in the study is:

In Türkiye, where a PR electoral system is in effect for parliamentary elections, voter electoral preferences are better explained by the proximity model than the directional model.

Since our major purpose is to replicate MacDonald et al.'s (1995) model, we purposefully selected measures similar to the ones used in their study. To this end, we decided to use the Comparative Study of Electoral Systems (CSES) data that covers nearly identical measures for the variables. The CSES Secretariat administers the CSES project, which is a common initiative of the Institute of Social Research at the University of Michigan in the US and the Gesis-Leibniz Institute for the Social Sciences in Germany. The project was founded in 1994 to promote international collaboration among national election studies and to allow researchers to investigate voting and party behaviors from a multilevel perspective. The publicly available dataset involves data from national elections all over the world, including Türkiye. Although Türkiye was involved in the 2011, 2015, and 2018 rounds, the variables included in our model were only asked in the 2015 one, as it was the only round holding variables of our interest. Our final dataset consists of a total of 249 respondents.

Data for four major Turkish political parties, effective in Turkish politics and represented in the parliament: the JDP, the RPP, the NAP, and the PDP, were included in the analysis. While the JDP is the incumbent party, placed in the center right, the RPP is the main opposition party, placed in the center left. The Turkish nationalist NAP and the pro-Kurdish PDP are positioned in opposite extremes, respectively far right and far left of the ideological spectrum.

Table 1 shows the coding and wording of the questionnaire items with their original and recoded values. These measures have been purposefully selected as they are identical with the measures in MacDonald et al.'s (1995) study. This enabled us to make a valid comparison of our results with the rest of the literature.

Table 1. Variables of the Analyses

Questionnaire Code	Questionnaire Wording	Variable Name	Original Value	Recoded Value
IMD2003	Education of the respondent (Highest educational attainment)	Education	0=None / No education illiterate 1=Primary education/ Lower secondary education 2=Higher secondary education 4=University education	0= None / No education illiterate 1=Primary education/ Lower secondary education 2=Higher secondary education 3=University education
IMD2001_1	Age of respondent (in years)	Age	Continuous	Continuous
IMD2002	Gender of respondent	Gender	1= Male 2= Female	0= Male 1= Female
IMD2006	1= Lowest household income quintile 2= Second household income quintile 3= Third household income quintile 4= Fourth household income quintile 5= Highest household income quintile	Income	1= Lowest household income quintile 2= Second household income quintile 3= Third household income quintile 4= Fourth household income quintile 5= Highest household income quintile	1= Lowest household income quintile 2= Second household income quintile 3= Third household income quintile 4= Fourth household income quintile 5= Highest household income quintile
IMD3005_3	Party identification: Who	Party Identification	7920001=JDP 7920001=RPP 7920001=NAP 7920001=PDP	7920001=JDP 7920001=RPP 7920001=NAP 7920001=PDP
IMD3006_	Ideology Left-Right Self	Issue Distance/ Issue Scalar Product	00=Left ... 10=Right	
IMD3007_A/B/C/D	Ideology Left-Right Party A/B/C/D		0=Left ... 10=Right	
MD3008_A/B/C/D	Like-Dislike Party A/B/C/D	Voter embracement	0=Strongly Dislike ... 10=Strongly Like	0=Strongly Dislike ... 10=Strongly Like

ithin this realm, as the dependent variable—the electoral preferences of the voters—in accordance with MacDonald et al.'s (1995) measurement, we used the voters' embracement for each of the political parties under investigation. The question asks the respondents to select their degree of like/dislike for each of the political parties under investigation on a 10-point scale, where 0 is strongly dislike and 10 is strongly like.

Voter utility, as suggested by two approaches, was used as a key independent variable. Each individual utility of each voter for supporting each political party under investigation has been calculated using the formulas developed by MacDonald et al.'s (1995). These utilities were named as *issue distance* for the proximity utility and *issue scalar product* for the directional utility. The equations used to create each variable are explained in detail below. In addition, education, age, gender, and income were used as control variables that have also been included in MacDonald et al.'s (1995) work as demographic variables.

Utility function formula for the Proximity Model:

$$U_{ij} = -\left[\sum_{k=1}^{n_k} (\Theta_{ik} - \Theta_{jk})^2\right]^{1/2} \quad (1)$$

where,
U_{ij} = voter utility of party j for voter i,
n_k = number of issues,
Θ_{ik} = position of voter i on issue k.
Θ_{jk} = position of party j on issue k.

The utility function formula for the Directional Model:

$$U_{ij} = \sum_{k=1}^{n_k} l_{ik}.l_{jk} - P_{ij} \quad (2)$$

where,

U_{ij} = voter utility of party j for voter i,
n_k = number of issues,
I_{ik} = position of voter i on issue k,
I_{jk} = position of party j on issue k.

The region of penalty was specified with the following formula:

$$P_{ij} = 0 \text{ if } l_j < r \quad (3)$$

where,

l_j = distance of party j from the center,
r = radius of the region of acceptability.

It was suggested to 'construct a circle of radius r about the natural center of the issue space. The area within the circle is safe from penalty and is thus designed as the region of acceptability'. We used 80% of the region of acceptability. In other words, for those parties that exceed 80% of the ideological center, the voter utility was set to 0 (MacDonald et al., 1991; MacDonald et al,1995; MacDonald et al., 1998).

The relationship between independent and dependent variables was assessed by means of a series of multiple linear regression analyses. We have formulated three models to compare the validity and explanatory power of both models, as well as a demographic model for voter embracement for each political party. In the first model, we only tested the explanatory power of the demographic variables. In the second model, we also included the issue distance beside the demographic variables, while in the third model, we replaced issue distance with the issue scaler product. As a result, we ran 12 distinct regression analyses. As a further step, we also assessed the R squares of each model to compare the explanatory power of each model for voters' embracement of each political party.

Table 2. Comparison of Evaluation Models for the JDP

	Demographic model		Proximity model		Directional model	
	b	(se)	b	(se)	b	(se)
Education (Ref: No education)						
Primary	-0.30	(1.50)	0.02	(1.18)	-0.27	(1.50)
Secondary	-2.42	(1.53)	-2.01	(1.21)	-2.39	(1.54)
Post-secondary	-1.76	(1.59)	-0.82	(1.26)	-1.75	(1.60)
Age	-0.06***	(0.02)	0.01	(0.01)	-0.06**	(0.02)
Gender (Ref: Male)						
Female	0.94	(0.54)	0.51	(0.43)	0.93	(0.55)
Income (Ref: First Household Income Quintile)						
Second Household Income Quintile	-0.15	(1.04)	-0.13	(0.82)	-0.12	(1.04)
Third Household Income Quintile	0.26	(1.08)	-0.27	(0.85)	0.31	(1.09)
Fourth Household Income Quintile	-0.81	(1.06)	-0.87	(0.84)	-0.79	(1.07)
Highest Household Income Quintile	-0.94	(1.05)	-1.00	(0.83)	-0.88	(1.06)
Issue Distance			0.76***	(0.06)		
Issue Scalar Product					0.00	(0.01)
Constant	8.02***	(1.97)	8.77***	(1.55)	8.00***	(1.98)
Adjusted R²	**0.05**		**0.41**		**0.04**	
N. of cases	249		249		249	

Notes: *p≤0.05; **p≤0.01; ***p≤0.001. Entries are multiple linear regression coefficients with standard errors in parentheses.
Data: Comparative Study of Electoral Systems, 2015

3. Findings

The following four tables show the results of the 12 multiple linear regressions predicting voter embracement using the formulas suggested by the proximity and directional approaches. In addition, results of the demographic model were included in the table as controls. Each table consists of the results of analyses executed to predict voter embracement for one of four major political parties in Türkiye.

Table 2 shows the results of the analyses conducted using the data to predict voter embracement for the JDP. The first model showed that voter embracement for the JDP is statistically significantly associated with the age variable only ($b_i = -0.06, p \leq 0.001$). The negative sign of the coefficient score shows that, on average, voter embracement decreases as age increases. In other words, older respondents are less likely to associate themselves with the JDP than the young ones. On the other hand, education, gender, and income seem not to be statistically significantly associated with voter embracement of the JDP. The overall model produces a 0.05 adjusted R² score, which shows that the demographic model can explain only 5% of the variation in the dependent variable.

The second model tests the formula suggested by the proximity model. As can be seen from the table, issue distance is the only significant predictor ($b_i = -0.76, p \leq 0.001$) of voter embracement. The model produces a 0.41 adjusted R² score. This means that only only one independent variable, the ideological proximity of the respondent, can explain 41% of the variation in the voters' embracement of the JDP.

Similarly, the third model tests the formula suggested by the directional model. As can be seen from the table, unlike the issue distance, the issue scalar variable does not predict voter embracement statistically significantly. Only the age variable is significantly associated with the dependent variable ($b_i = -0.06, p \leq 0.01$). The model produces a 0.04 adjusted R² score only.

In Table 3, data for the RPP voters were used to test the models. The first model shows that education and age are significantly and positively associated with the embracement of the RPP. Both secondary and post-secondary school degree owners are significantly more likely to embrace the RPP than those with no formal education ($b_i = 3.22, p \leq 0.05$, and ($b_i = 3.99, p \leq 0.01$, respectively). On the other hand, older respondents, on average, are significantly more likely to embrace the RPP than younger respondents ($b_i = 0.08, p \leq 0.001$). The adjusted R^2 score for the model is 0.07.

The second model is designed to test the proximity formula. The education and age variables seemed to play similar roles in this model. Those with secondary and post-secondary degrees are significantly more likely to embrace the RPP than those with no formal education ($b_i = 2.72, p \leq 0.05$ and ($b_i = 2.92, p \leq 0.01$, respectively). On the other hand, older respondents, on average, are significantly more likely to embrace the RPP than younger respondents ($b_i = 0.05, p \leq 0.001$). Lastly, the issue distance variable seems to be strongly and statistically significantly associated with voter embracement ($b_i = 0.73, p \leq 0.001$). The adjusted R^2 score for the model is 0.50.

The third model tests the directional formula. As can be seen from the table, although the issue scalar product variable is significantly associated with voter embracement ($b_i = -0.10, p \leq 0.001$), the effect size is small since the adjusted R^2 score for the model is 0.15.

Table 3. Comparison of Evaluation Models for the RPP

	Demographic model		Proximity model		Directional model	
	b	(se)	b	(se)	b	(se)
Education (Ref: No education)						
Primary	2.39	(1.39)	1.79	(1.02)	2.59	(1.33)
Secondary	3.22*	(1.42)	2.72*	(1.05)	3.24	(1.36)*
Post-secondary	3.99**	(1.48)	2.98**	(1.09)	4.26	(1.42)**
Age	0.08***	(0.01)	0.05***	(0.01)	0.07***	(0.01)
Gender (Ref: Male)						
Female	0.38	(0.50)	0.66	(0.37)	0.63	(0.49)
Income (Ref: First Household Income Quintile)						
Second Household Income Quintile	1.58	(0.96)	0.97	(0.71)	1.59	(0.92)
Third Household Income Quintile	0.42	(1.00)	0.33	(0.74)	0.84	(0.96)
Fourth Household Income Quintile	1.89	(0.99)	1.56*	(0.73)	1.80	(0.95)
Highest Household Income Quintile	0.75	(0.97)	0.87	(0.72)	0.85	(0.93)
Issue Distance			0.73***	(0.05)		
Issue Scalar Product					-0.10***	(0.02)
Constant	-3.01	(1.83)	1.87***	(1.39)	-2.19***	(1.76)
Adjusted R²	0.07		0.50		0.15	
N. of cases	249		249		249	

Notes: *p≤0.05; **p≤0.01; ***p≤0.001. Entries are multiple linear regression coefficients with standard errors in parentheses.
Data: Comparative Study of Electoral Systems, 2015

Table 4 shows the results of the analyses conducted to predict voter embracement for the NAP. In the first model, voter embracement for the respondents from the third, fourth, and highest income quintiles is significantly higher than the voter embracement for the respondents from the reference category, the first household income quintile ($b_i = 2.14, p \leq 0.05$; $b_i = 2.04, p \leq 0.05$ and $b_i = 2.71, p \leq 0.01$, respectively). The adjusted R2 score for the model is 0.07.

The second model predicts voter embracement for the NAP using the proximity formula. Among demographic variables, the only statistically significant difference seems to be between those respondents from the highest household income quintile and those from the first household income quintile (bi=1.76, p≤0.05). On the other hand, issue distance exerts a strong effect on the dependent variable. The issue of distance is significantly associated with voter embracement ($b_i = 0.53, p \leq 0.001$). The adjusted R^2 score for the model is 0.31.

In the third model, apart from the significant differences between the reference category of the income variable, the first household income quintile, and the third ($b_i = 2.13, p \leq 0.05$)

as well as the highest ($b_i = 2.67, p \leq 0.01$), no statistically significant difference can be observed between the categories of the independent variables. The issue scalar product does not associate with voter embracement significantly, and the model produces a 0.07 adjusted R^2 score only

Table 4. Comparison of Evaluation Models for the NAP

	Demographic model		Proximity model		Directional model	
	b	(se)	b	(se)	b	(se)
Education (Ref: No education)						
Primary	0.93	(1.22)	0.23	(1.05)	0.88	(1.22)
Secondary	1.96	(1.25)	1.25	(1.08)	1.85	(1.25)
Post-secondary	0.71	(1.29)	0.14	(1.12)	0.61	(1.30)
Age	-0.01	(0.01)	0.00	(0.01)	-0.01	(0.01)
Gender (Ref: Male)						
Female	0.12	(0.44)	0.09	(0.38)	0.15	(0.44)
Income (Ref: First Household Income Quintile)						
Second Household Income Quintile	1.14	(0.84)	0.53	(0.73)	1.09	(0.85)
Third Household Income Quintile	2.14*	(0.88)	1.35	(0.76)	2.13*	(0.88)
Fourth Household Income Quintile	2.09*	(0.86)	1.42	(0.75)	2.02	(0.87)
Highest Household Income Quintile	2.71**	(0.85)	1.76*	(0.74)	2.67**	(0.86)
Issue Distance			**0.53***	**(0.05)**		
Issue Scalar Product					**-0.00**	**(0.01)**
Constant	0.39	(1.60)	2.96***	(1.41)	0.62	(1.63)
Adjusted R^2	0.07		0.31		0.07	
N. of cases	249		249		249	

Notes: *p≤0.05; **p≤0.01; ***p≤0.001. Entries are multiple linear regression coefficients with standard errors in parentheses.
Data: Comparative Study of Electoral Systems, 2015.

Table 5 presents the results of the analyses conducted to predict voter embracement for the PDP. In the first model, voter embracement seems to be significantly associated with all the demographic variables. Voter embracement is significantly lower for primary, secondary, and post-secondary school degree owners than for those with no formal education ($b_i = -2.99, p \leq 0.01$; $b_i = -3.47, p \leq 0.01$ and $b_i = -3.58, p \leq 0.01$, respectively). Voter embracement is significantly smaller for female respondents than male respondents ($b_i = -1.39, p \leq 0.001$). Also, voter embracement is significantly lower for those respondents from the second ($b_i = -1.99, p \leq 0.01$), the fourth ($b_i = -1.47, p \leq 0.05$) and the highest ($b_i = -1.60, p \leq 0.05$) than those respondents from the first household income quintile. Yet, the overall model can only explain 9% of the variation in the dependent variable.

Table 5. Comparison of Evaluation Models for the PDP

	Demographic model		Proximity model		Directional model	
	b	(se)	b	(se)	b	(se)
Education (Ref.: No education)						
Primary	-2.99**	(1.04)	-2.27*	(0.93)	-3.43**	(1.07)
Secondary	-3.47**	(1.06)	-2.84**	(0.95)	-3.94***	(1.09)
Post-secondary	-3.58**	(1.10)	-3.25**	(0.98)	-3.97**	(1.01)
Age	-0.02	(0.01)	-0.03*	(0.01)	-0.02	(0.01)
Gender (Ref.: Male)						
Female	-1.39***	(0.37)	-1.07**	(0.34)	-1.41***	(0.37)
Income (Ref.: First Household Income Quintile)						
Second Household Income Quintile	-1.99**	(0.72)	-1.86**	(0.64)	-1.97**	(0.72)
Third Household Income Quintile	-0.95	(0.75)	-0.53	(0.67)	-0.88	(0.75)
Fourth Household Income Quintile	-1.47*	(0.73)	-1.26	(0.65)	-1.44	(0.73)
Highest Household Income Quintile	-1.60*	(0.73)	-1.08	(0.65)	-1.58*	(0.72)
Issue Distance			**0.39***	**(0.04)**		
Issue Scalar Product					**-0.02**	**(0.01)**
Constant	7.84***	(1.36)	9.00***	(1.22)	8.48***	(1.41)
Adjusted R^2	0.09		0.28		0.10	
N. of cases	249		249		249	

Notes: *p≤0.05; **p≤0.01; ***p≤0.001. Entries are multiple linear regression coefficients with standard errors in parentheses.
Data: Comparative Study of Electoral Systems, 2015.

The second model reveals similar results. Again, education, gender, and income seem to be significantly associated with voter embracement. Voter embracement is significantly lower for primary, secondary, and post-secondary school degree owners than for those with no formal education $(b_i = -2.27, p \leq 0.05, b_i = -2.84, p \leq 0.01$ and $b_i = -3.25, p \leq 0.01$, respectively). Age seems to be significantly and negatively associated with voter embracement $(b_i = -0.03, p \leq 0.05)$. For female respondents, voter embracement is significantly lower than for male respondents $(b_i = -1.07, p \leq 0.01)$. For the income effect, it seems that being from the second household income quintile makes respondents significantly less utile relative to being from the first household income quintile $(b_i = -1.86, p \leq 0.01)$. On the other hand, the issue distance seems to be significantly and positively effecting voter embracement $(b_i = 0.39, p \leq 0.00)$, and the overall model can explain 28 % of the variation in the dependent variable.

The third model shows the results of the regression analyses designed to predict voter embracement by the directional formula. In the third model, education, gender, and income are significantly associated with voter embracement. Voter embracement is significantly lower for primary, secondary, and post-secondary school degree owners than for those with no formal education $(b_i = -3.43, p \leq 0.01$, $b_i = -3.94, p \leq 0.001$, and $b_i = -3.97, p \leq 0.01$, respectively). Age does not seem to be exerting a significant effect on voter embracement. For female respondents, voter embracement is significantly lower than for male respondents $(b_i = -1.41, p \leq 0.001)$. It seems that being from the second and highest household income quintiles makes respondents significantly less utile than being from the first household income quintile $(b_i = -1.97, p \leq 0.01$ and $b_i = -1.58, p \leq 0.05$, respectively). The issue scalar product does not seem to be significantly associated with voter embracement. The adjusted R^2 score of the model is only 10%.

Table 6 compares the adjusted R^2 coefficient scores produced by each model, predicting voter embracement for each political party. Without exception, for all four political parties, the proximity model produces dramatically higher adjusted R^2 scores than do the demographic and directional models.

Table 6. Comparison of Evaluation Models (N = 249)

Party	Demographic Model R^2	Proximity Model R^2	Directional Model R^2
JDP	0.05	0.41	0.04
RPP	0.07	0.50	0.15
NAP	0.07	0.31	0.07
PDP	0.09	0.28	0.10

Note: Entries are Adjusted R^2 coefficients.

Conclusion and Discussion

This research was set out to determine which of the two models of the spatial theories of party competition, namely the proximity model and the directional model, is superior to explain the party preference of the Turkish voters. To reiterate our first claim, we suggested that the proximity model is a more appropriate tool than the directional model to capture voters' electoral preferences in Türkiye.

To test this argument, we employed CSES data for four prominent political parties in Türkiye, namely the JDP, the RPP, the NAP, and the PDP. As the dependent variables for both models are continuous, we used the multiple linear regression technique to investigate the explanatory power of the two models. Our findings supported the view that the proximity model appeared to be more powerful in explaining Turkish voters' electoral behavior than the directional model. Several explanations can relate to our findings. The first finding could link to a standing discussion in the literature on the relationship between electoral institutions and ideological congruence. Concerning the larger debate between the proximity and directional models in the existing literature, our study's results are in conformity with

Westholm's (1997) and other researchers arguments suggesting that in proportional representation electoral systems, the proximity model is better at explaining electoral preferences (Blais and Bodet 2006; Budge and McDonald 2007; Huber and Powell 1994; McDonald and Budge 2005; McDonald et al., 2004; Powell 2000; 2006; Powell and Vanberg 2000). The majority of the works belonging to this discussion have found that the PR systems produce more congruence than the SMD systems (McDonald et al., 2004; Powell 2000; Powell and Vanberg 2000; McDonald, Mendes and Budge 2005).

Another explanation could be related to the education and political sophistication level of Turkish respondents. Politics is a very important and decisive factor in an ordinary citizen's life in Türkiye. Being a voter or a member of the governing party usually makes it easier to get a job and brings prestige and respectability. Thus, voters are interested in and well educated about daily politics. Having this in mind and MacDonald et al.'s (1995) argument that educated and politically interested individuals may use proximity and the others the directional formula, we could link our result with Turkish voters' political sophistication. This argument requires an empirical test and arouses our future research interests.

Another interesting implication of our study, which we believe provides another avenue for future research but is beyond the scope of this one, is the changing explanatory power of each model according to the ideological positions of the parties under investigation. The increasing explanatory power of the proximity model for the center parties, the JDP and the RPP, vis-à-vis the extremist parties, the NAP and PDP, and the increasing explanatory power of the directional model for more leftist parties, the RPP and the PDP, vis-à-vis the rightist JDP and NAP, are interesting for the link between ideological position and ideological congruence.

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