

Voting in Transition: Participation and Alienation in Egypt's 2012 Presidential Election

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Abstract

How does voter turnout change as countries transition to democracy? Using district-level data from Egypt's 2012 presidential election, we show that turnout was higher in more educated and urban districts—a stark reversal from voting patterns under the authoritarian Mubarak regime, when less educated and poorer areas were more likely to participate. However, this pattern weakened in the second round of the 2012 election, when the choice was restricted to two candidates who reflected Egypt's primary pre-revolution political divide. Urban and educated districts experienced a decline in turnout and a rise in protest voting during the second round relative to the first, suggesting that key political groups were alienated from the electoral process. These results indicate that who participates in elections can shift quickly as institutions change, but this is conditional on the choice of candidates available to voters.

Keywords

Egypt – political participation – elections – turnout – protest voting – transition

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On May 10, 2012, thousands of Egyptians gathered in front of their television screens to watch the first-ever debate between presidential candidates, a scene that would have been unthinkable before the 2011 overthrow of President Hosni Mubarak. Partisan viewers cheered as the two candidates—Amr Moussa, a former secretary-general of the Arab League, and Abdel Moneim Aboul Fotouh, a liberal Islamist and former leader in the Muslim Brotherhood—confidently asserted their governing qualifications and sharply criticized their opponent's ideological leanings.¹

The excitement surrounding the event symbolized the transition's promise to broaden the choices offered to Egyptian voters: following a highly-contested parliamentary election in late 2011 and early 2012, a dozen candidates competed in the first round of the presidential election, representing nearly all of the country's political currents.² Given this unprecedented competition, however, the results of the first round were disappointing to many. The two candidates with enough votes to proceed to the run-off election were Mohamed Morsi, the Muslim Brotherhood candidate, and Ahmed Shafiq, a former military officer and Mubarak's last prime minister. Each received less than 25 percent of the vote in the first round, barely edging out Aboul Fotouh and Hamdeen Sabahi, a leftist and Arab nationalist politician and longtime opposition figure. Of all the first-round candidates, Morsi and Shafiq seemed the least likely to transform the country's existing political cleavages and institutions, as they represented the same choice of ideologies and organizations that had dominated politics during the previous three decades of Mubarak's rule.

This paper argues that these changing dynamics of elite political competition shaped the patterns of participation that emerged across the two rounds of the 2012 Egyptian presidential election. In the first round, where voters had a wider array of choices, we show a stark reversal of Egypt's historic voter participation patterns that dominated under Mubarak. In the Mubarak-era elections, as a result of patronage-induced voting in an autocratic setting, overall voter turnout was low, and participation was highest in impoverished rural areas with low levels of educational attainment.³ In contrast, during the first round of the 2012 presidential election, overall turnout was higher, with voters in

1 "Egypt rivals clash in presidential debate," *Al-Jazeera*, May 11, 2012, <http://www.aljazeera.com/news/middleeast/2012/05/201251104423738925.html>.

2 Several candidates were disqualified prior to the final ballot, and a thirteenth candidate dropped out prior to the voting. The Salafi trend was not well represented among the candidates as a result of the disqualification of Hazem Abu Ismail.

3 Lisa Blaydes, *Elections and Distributive Politics in Mubarak's Egypt* (Cambridge: Cambridge University Press, 2011).

better-educated and urban areas participating at much higher rates than those in poor or rural districts—a pattern reminiscent of voter turnout in established democracies. This finding suggests that who turns out can shift quickly when regime change results in freer elections.

In the second round of the election, however, this pattern of higher turnout in better-educated and urban areas—while still evident—was noticeably weaker once the choices were restricted to Morsi and Shafiq. Despite an overall increase in turnout in the second round, voter participation fell in many urban and highly educated districts. In addition, these districts also experienced noticeable increases in the casting of spoiled ballots, implying a significant protest vote.⁴ These changes suggest a relatively stronger role for patronage-based voting in the second round, as the candidates activated the clientelistic networks of the Muslim Brotherhood and Mubarak's former party, the National Democratic Party (NDP), to win the support of poor and rural voters.⁵ More importantly, these changes in voting also indicate the extent to which the first round results contributed to the alienation of many middle class, urban, and leftist voters, whose views were more in line with the politics of Egypt's revolutionary camp.⁶

The question of who participates politically has important implications for democratic outcomes. The level of electoral participation by citizens overall, as well as by specific sub-groups of citizens, often proxies for the degree to which they accept the political system and view it as legitimate. Participation is even

4 Several scholars have documented how spoiled ballots are often cast as a form of protest. See Blaydes, 2011; Amanda Driscoll and Michael J. Nelson, "Ignorance or opposition? Blank and spoiled votes in low-information, highly politicized environments," *Political Research Quarterly* (2014): 1–15; Fredrik Uggla, "Incompetence, alienation, or calculation? Explaining levels of invalid ballots and extra-parliamentary votes," *Comparative Political Studies* 41, no. 8 (2008); Timothy J. Power and James C. Garand. "Determinants of invalid voting in Latin America," *Electoral Studies* 26, no. 2 (1995).

5 Rana Khazbak and Mohamed Elmeshad, "Shafiq campaign takes pages from the NDP handbook," *Egypt Independent*, June 15, 2012, <http://www.egyptindependent.com/news/shafiq-campaign-takes-pages-ndp-handbook>.

6 The definition of who constitutes a "revolutionary" was and is highly contested in Egyptian politics. For our purposes, we use the revolutionary label to refer to the coalition of primarily urban and secular/leftist-oriented activists who participated in the street politics of the January uprising. We recognize the limitations of this definition, particularly the fact that many Islamists should also be considered revolutionary. However, scholarly analysis of who participated in Egypt's revolution does provide some support for the idea that Egyptian participants in the revolution were largely middle-class, college-educated, and urban. See: Mark R. Beissinger, Amaney Jamal, and Kevin Mazur, "Explaining Divergent Revolutionary Coalitions: Regime Strategies and the Structuring of Participation in the Tunisian and Egyptian Revolutions," *Comparative Politics* 48, no. 1 (2015): 1–24.

more important during periods of political transition: given the fragility of new institutions, any alienation of key constituencies can be highly destabilizing. In Egypt, the alienation of liberal, leftist and revolutionary political actors (who had the strongest support among middle class and educated voters) during the transition—particularly following the 2012 presidential election—likely contributed in part to the country’s democratic breakdown only a year later, as these political leaders and their associated groups increasingly rejected nascent democratic institutions and adopted a strategy of extra-institutional politics.⁷

The paper proceeds as follows: we first discuss voter participation under the Mubarak regime, before providing an overview of the political opening created by Mubarak’s fall. Next, we detail our research questions and data, which include demographic data from the 2006 Egyptian census and district-level election results. We then present the analysis of participation patterns in the election, including both turnout and spoiled ballots. We conclude by discussing the implications of these changes for the trajectory of Egypt’s failed transition to democracy.

Voter Participation under Mubarak’s Regime

In autocracies, elections can have the seemingly paradoxical effect of stabilizing the regime in the long run.⁸ Achieving high voter turnout in elections is important to deter potential challengers by signaling the invincibility of the incumbent leader.⁹ Legislative elections in autocracies also provide

7 There is an extensive literature about the relationship between social class and support for democracy. In many nascent democracies, middle class and educated citizens often act as a ballast for democratic politics and institutions. In the case of Egypt, the evidence is more mixed. These groups are eager to participate through voting, but their support is partially conditional on the types of candidates participating. For further discussion of social class and support for democracy, see: Seymour Martin Lipset, *Political Man: The Social Bases of Politics* (New York: Doubleday, 1960); Samuel Huntington, “Democracy’s Third Wave,” *Journal of Democracy* 2, no. 2 (1991): 12–34; Edward L. Glaeser, Giacomo A.M. Ponzetto, and Andrei Shleifer, “Why does democracy need education?” *Journal of Economic Growth* 12, no. 2 (2007): 77–99; M. Najeeb Shafiq, “Do education and income affect support for democracy in Muslim countries? Evidence from the *Pew Global Attitudes Project*,” *Economics of Education Review* 29, no. 3 (2010): 461–469.

8 Carl Henrik Knutzen, Håvard Mokleiv Nygård and Tore Wig, “Autocratic elections: Stabilizing tool or force for change?” *World Politics* 69, no. 1 (2017): 98–143.

9 Beatriz Magaloni, *Voting for Autocracy: Hegemonic Party Survival and Its Demise in Mexico* (New York: Cambridge University Press, 2006); Blaydes, 2011.

elites with the opportunity to compete over access to state resources, so candidates have strong incentives to mobilize voters.¹⁰ Because turnout is important but there is little choice or limited difference between the candidates, voting in these contexts typically revolves around patronage and clientelistic relationships, rather than policy and ideology.¹¹ In this patronage environment, the likelihood that an individual turns out to vote increases based on the benefits that accrue to their pocketbooks.¹² Accordingly, voting is relatively more valuable for poorer individuals, for whom these payments are worth more.¹³ Consistent with this argument, research has shown that (1) less

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- 10 Blaydes, 2011; Ellen Lust, "Competitive Clientelism in the Middle East," *Journal of Democracy* 20, no. 3 (2009): 122–135.
- 11 Jennifer Gandhi and Ellen Lust, "Elections under authoritarianism," *Annual Review of Political Science* 12 (2009): 403–422; Lisa Blaydes, "Who votes in authoritarian elections and why? Determinants of voter turnout in contemporary Egypt," *APSA Annual Meeting* (2006); Thomas Pepinsky, "Autocracy, elections, and fiscal policy: Evidence from Malaysia," *Studies in Comparative International Development* 42, no. 1–2 (2007): 136–163; Tarek Masoud, "Why Islam Wins: Electoral Ecologies and Economics of Political Islam in Contemporary Egypt," Doctoral Dissertation, Yale University (2008); Magaloni, 2006.
- 12 The word patronage can be used in the context of different types of exchange between citizens and politicians. In the context of voting in Egypt, the dominant type of patronage linked to voter turnout is vote buying, in which supporters of a specific candidate offer cash or food in exchange for a vote. During the presidential elections in 2005, there were reports of Mubarak supporters giving away raffle tickets for household goods like a stove or television. See: Michael Slackman, "Egypt Hold a Multi-Choice Vote, but the Answer is Mubarak," *The New York Times*, September 9, 2005. During the 2012 elections, there were rumors that such practices were continuing. See: Asma Badawi, "[The rotating ballot' ... the favorite way of vote brokers for election fraud]," *El Watan News*, May 24, 2012, <http://www.elwatannews.com/news/details/6844>; David Kirkpatrick, "Muslim Brotherhood Candidate Has An Early Lead in Egypt Presidential Election," *The New York Times*, May 24, 2012; "Live Updates 2: Egypt presidential runoffs enter final day," *Ahram Online*, June 17, 2012, <http://english.ahram.org.eg/News/45273.aspx>.
- 13 Vleria Brusco, Marcelo Nazareno, and Susan Carol Stokes, "Vote buying in Argentina," *Latin American Research Review* 39, no. 2 (2004): 66–88; Susan C. Stokes, Thad Dunning, Marcelo Nazareno, and Valeria Brusco, *Brokers, Voters, and Clientelism: The Puzzle of Distributive Politics* (New York: Cambridge University Press, 2013). In their study of seven Arab countries (not including Egypt), De Miguel et al. (2015) find that both poor and rich citizens that use patronage are more likely to turn out, but that patronage has a stronger effect on turn out among well-to-do citizens. This may be because their measure of patronage does not capture direct vote buying, but rather focuses on whether respondents use "wasta," or connections to the government to get access to better goods or jobs. See: Carolina de Miguel, Amaney Jamal, and Mark Tessler, "Elections in the Arab World: Why Do Citizens Turn Out," *Comparative Political Studies* 48, no. 11 (2015): 1355–1388. Corstange also finds that in more competitive contests in Lebanon, politicians do sometimes make

educated, rural, and poorer voters participate more frequently in authoritarian contexts,¹⁴ and (2) more educated, urban, and middle-class voters are less likely to vote, but (3) are more likely to vote for the opposition as a form of protest voting if they do participate.¹⁵

Egyptian elections in the Mubarak era reflected these patronage-based turnout patterns.¹⁶ Legislative elections with some degree of multi-party competition were held relatively frequently during the presidencies of Anwar Sadat and Hosni Mubarak (in 1976, 1979, 1984, 1987, 1990, 1995, 2000, 2005, and 2010). Though the NDP always retained its sizable majority, opposition members (including from the then-banned Muslim Brotherhood) were granted varying degrees of freedom to compete. In 2005, the Brotherhood won eighty-eight seats in parliament—approximately 20 percent of the total—but lost nearly all of them in 2010 after widespread election rigging. The regime also held a nominally competitive presidential election in 2005, though Mubarak received 89 percent of the vote in the official count.

Elections under Egypt's autocracy were not intended to provide voters with a meaningful choice of ideologies and policies, since the overall winner of parliamentary and presidential contests was never in doubt. Instead, the presidential election served to affirm Mubarak's position, while parliamentary elections provided an arena for elites to compete over access to state resources.¹⁷ In this context, voters were induced to participate primarily through the promise of payments and other services, and so turnout was higher among poorer citizens who valued these exchanges more. As Blaydes has documented, illiterate Egyptians, primarily concentrated in impoverished rural areas, were more likely to participate in elections under Mubarak's regime.¹⁸ Furthermore, Masoud has shown that middle class voters who had less need for patronage were more likely to cast ballots for the Muslim Brotherhood, if they voted at

efforts to buy these expensive voters, to the detriment of voters in their strongholds. See: Daniel Corstange, "Clientelism in Competitive and Uncompetitive Elections," *Comparative Political Studies* (2017).

- 14 Blaydes, 2011; Ellen Lust, "Elections under authoritarianism: preliminary lessons from Jordan," *Democratization* 13, no. 3 (2006): 456–471.
- 15 Kevin Croke, Guy Grossman, Horacio A. Larreguy, and John Marshall, "Deliberate disengagement: How education can decrease political participation in electoral authoritarian regimes," *American Political Science Review* 110, no. 3 (2016): 579–600; Magaloni, 2006; Masoud, 2008.
- 16 Carrie Rosefsky Wickham, *Mobilizing Islam: Religion, activism and political change in Egypt* (Columbia University Press, 2002).
- 17 Blaydes, 2011.
- 18 Blaydes, 2006; Blaydes, 2011.

all.¹⁹ In general, turnout was relatively low, with reported figures of approximately 30 percent in the parliamentary elections of 2005 and 2010, and approximately 23 percent participating in the 2005 presidential election. During this period, NDP vote share remained quite high, despite the opposition's participation in the elections (See Table 1 below).

TABLE 1 *Turnout and NDP vote share in Egyptian elections, 2005–2012*²⁰

Election Year	2005	2005	2010	2011	2012	2012
Institution	Presidency	Parliament	Parliament	Parliament	Presidency (round 1)	Presidency (round 2)
Turnout	23%	28%	27%	62%	46%	51%
Share of NDP & NDP-affiliated seats ²¹	–	70–78%	93–97%	9% ²²	–	–
Vote share of main NDP or <i>ancien regime</i> candidate ²³	88.5%	–	–	–	23.7%	48.3%

19 Tarek Masoud, *Counting Islam: Religion, Class, and Elections in Egypt* (New York: Cambridge University Press, 2014).

20 International IDEA, "Voter turnout data for Egypt (parliamentary, presidential)," 2015, <http://www.idea.int/vt/countryview.cfm?id=69>, accessed July 20, 2016. These are the official estimates. Some observers report that actual turnout figures may have been lower.

21 Because both the 2005 and 2010 elections had a large number of NDP-affiliated independents, the exact number of NDP seats is disputed. In 2005, of the 454 seats, 10 were appointed by the president and not elected, while the NDP won 311 and NDP-affiliated independents won roughly 36. In 2010, 10 of the 518 seats were appointed, and the best estimate is that the opposition only received 16 of 508 elected seats. In both 2005 and 2010, we generate the seat share value from a total of 444 seats and 508 seats respectively. For 2005, see: "Parliamentary elections 2005," *Ahram Weekly Online*, December 15–21, 2005, http://weekly.ahram.org.eg/Archive/2005/parliamentary_elections.htm and Gregg Carlstrom, "Explainer: Inside Egypt's recent elections," *Al-Jazeera*, November 15, 2011, <http://www.aljazeera.com/indepth/spotlight/egypt/2011/11/20111138837156949.html>. For 2010, see: "Official Results: 16 opposition, 424 NDP, 65 'independents,'" *Ahram Online*, December 6, 2010, <http://english.ahram.org.eg/NewsContent/1/5/1321/Egypt/Egypt-Elections-/Official-results---opposition,-NDP,-independents.aspx>.

22 We calculate this by adding together the individual and PR district seats from parties viewed as the "felool" parties, or the parties that included "remnants" of the old regime.

Transitional Elections

After a wave of revolutionary fervor ended Mubarak's thirty-year presidency in early 2011, the expectation was that future elections would look different. Though the Supreme Council of the Armed Forces (SCAF) governed during this period, Egypt appeared to initiate a transition from an authoritarian political regime to a democratic one, as a series of elections sought to restructure the state and its relationship with the Egyptian people. A referendum on several amendments to the constitution took place in March 2011, and the country's first free parliamentary elections were held beginning in November of that year. Despite some dissatisfaction with the accelerated electoral timeline, turnout in these elections was significantly higher than before—approximately 62 percent—reflecting the fact that voters now had real options to consider when making their vote choice.²⁴

Islamists dominated the 2011 parliamentary elections, in part because their superior organizations were more prepared to compete politically following the revolution.²⁵ As the parliament became increasingly unpopular in the

These include the: Egypt National Party, Egyptian Citizen Party, Freedom Party, Union Party, Arab Egyptian Union Party, and several of the candidates who ran as independents. There is some debate about what parties should be considered NDP-offshoots or “felool” parties. We used multiple reports and verified across those lists. See: “NDP Offshoots,” *Ahram Online*, November 18, 2011, <http://english.ahram.org.eg/NewsContent/33/104/26897/Elections-/Political-Parties/NDP-Offshoots.aspx> and Adel Al-Sanhouri, “Ahzab al-Felool al-Jedida [New Felool Parties],” *Al-Youm al-Saba'a*, September 21, 2011, <http://www.youm7.com/story/2011/9/21/%D8%A3%D8%AD%D8%B2%D8%A7%D8%A8-%D8%A7%D9%84%D9%81%D9%84%D9%88%D9%84-%D8%A7%D9%84%D8%AC%D8%AF%D9%8A%D8%AF%D8%A9/496729>.

23 In 2005, Hosni Mubarak is the NDP presidential candidate. In 2012, Ahmed Shafiq is widely considered the candidate of the old regime. Those results are from: “The final results of the first round,” *The Presidential Elections Commission 2012 [Egypt]*, <http://pres2012.elections.eg/round1-results>; “The final results of the runoff round,” *The Presidential Elections Commission 2012 [Egypt]*, <http://pres2012.elections.eg/round2-results>.

24 International IDEA, 2015.

25 The reason for the strength of MB and NDP mobilization relative to other political groups remains a topic of debate. In his recent book, Masoud (2014) argues that Islamist parties were successful in Egypt in 2011 and 2012 for two reasons related to the country's underdevelopment. First, prior to the revolution, the dire economic situation of many Egyptians made it easy for the ruling National Democratic Party (NDP) to engage in vote buying and patronage politics. This, in turn, meant that other political parties had difficulty competing with the NDP on a platform of wealth redistribution. The Muslim Brotherhood, with its message that cut across class lines, did not suffer from this same disadvantage. Second,

spring of 2012, however, the presidential election provided a potential opportunity for non-Islamist political groups to assert greater influence over Egypt's political trajectory. A diverse, crowded field of twelve presidential hopefuls competed in the first round in May 2012.²⁶ The frontrunners included: Morsi, Shafiq, Aboul Fotouh, and Moussa, as well as the dark horse candidacy of Hamdeen Sabahi. Some candidates were self-financed, and others garnered private support, but all used a wide variety of tactics, including traditional vote buying and patronage, as well as door-to-door canvassing, social media, radio ads, billboards, endorsements from preachers and imams, televised debates, and sometimes even folk songs, to spread the message of their campaigns.²⁷

This choice of candidates was unprecedented in Egyptian history.²⁸ In particular, the competitive candidacies of Sabahi, Aboul Fotouh, and to a lesser extent Moussa, represented political tendencies that had largely been marginalized under the previous regime. During Mubarak's presidency, the regime's narrative of Mubarak and the NDP standing against the looming threat posed by the Muslim Brotherhood and other more radical Islamist organizations had dominated. However, these revolutionary-aligned candidates drew support from a diverse array of political actors, including many Egyptians who backed neither the Muslim Brotherhood nor the old regime. Aboul Fotouh, for instance, had a broad coalition of supporters, including some liberals, as well as the endorsement of the main Salafi political parties. Pre-election polls

the large agrarian and informal sector undermines the country's potential for national structures such as unions to facilitate class-based mobilization. Instead, Egypt possesses many religious associations and organizations that could easily serve as institutional support for political mobilization after the revolution.

- 26 In addition, ten candidates were previously disqualified from the race in April 2012. See: George Sadek, "Egypt: Supreme Electoral Commission Disqualifies Ten Candidates from Presidential Race," *Library of Congress: Global Legal Monitor*, April 24, 2012.
- 27 Nermin Sami, "Egypt elects via the small screen," *Al-Hayat*, June 18, 2012; Mohammad Agam, Ahmed Ashraf, and Christine Ashraf, "Nile boats and bicycles and popular songs at the conclusion of campaigning for the Egyptian presidential candidates," *Asharq al Awsat*, May 12, 2012.
- 28 In the previous presidential elections, held in 2005, 9 candidates were allowed to run, including then-President Mubarak. However, there was an overwhelming consensus that Mubarak would win. In the end, he received over 6.3 million of the 7.1 million valid votes, while the second place finisher, Ayman Nour, only received 540,000. See: Michael Slackman, "Panel Clears 9 Candidates to Run Against Mubarak in Egypt," *The New York Times*, August 12, 2005; Michael Slackman, "Mubarak's Victory Orderly, but Opposition is Still Angry," *The New York Times*, September 10, 2005.

held shortly before the contest even predicted that Moussa and Aboul Fotouh would be the winners of the first round.²⁹

Despite performing relatively well, Sabahi, Aboul Fotouh, and Moussa appeared to split each other's votes.³⁰ In the final results, Morsi and Shafiq took the first and second spots to compete in the run-off, though Shafiq only narrowly avoided being knocked out by Sabahi, whose unexpected third-place finish was propelled by votes from the revolutionary camp as well as individuals who perceived him to be the only credible non-Islamist with no ties to the old regime.³¹

This second round contest—the Muslim Brotherhood versus the old regime—reflected a familiar and disappointing choice for many Egyptians.³² The Secretary General of the Arab League, Dr. Nabil al-Arabi, voiced his sentiments regarding the elections, echoing the reaction of many who were dismayed by the outcome: “[the election] results were below the expectations of the revolutionary forces and did not rise up to the level of the huge sacrifices that were offered by the Egyptian people.”³³ Sabahi and other activists called for a boycott, either by non-voting or the deliberate spoiling of ballots, and they found support from Egyptians who felt that Morsi and Shafiq reflected the country's “two wrongs.”³⁴ Many could not bring themselves to make “a superimposed choice that was forced upon us by SCAF to choose between the man they want and the man we don't want.”³⁵

As revolutionary forces debated whether to boycott the second round of the election, Morsi and Shafiq mobilized their supporters. Both candidates could draw on well-developed patronage networks.³⁶ Many observers claimed that

29 Reem Leila, “In the eyes of the pollsters,” *Al-Ahram Weekly*, May 17–23, 2012.

30 Votes for Sabahi, Moussa, and Fotouh are highly correlated with each other and less so with votes for Morsi and Shafiq.

31 Evan Hill, “Egypt's surprise candidate: Hamdeen Sabahi,” *Al-Jazeera*, June 4, 2012.

32 David D. Kirkpatrick and Kareem Fahim, “Egypt Race Pits Aid to Mubarak Against Islamist,” *The New York Times*, May 25, 2012; Nancy A. Youssef, “Sabahi, Aboul Fotouh won't endorse in runoff, raising fears Egypt presidential vote will be polarizing affair,” *McClatchy*, May 31, 2012.

33 Quoted in: Sawсан Abu Hussein, “Al-Arabi: Egyptian elections transparent, but the result does not achieve the level of the revolution,” *Asharq al-Awsat*, May 31, 2012.

34 Mona Ammar, quoted in: Jeffrey Fleishman and Reem Abdellatif, “Egypt election boycott gains momentum,” *Los Angeles Times*, June 11, 2012.

35 Lamiaa, quoted in: Dina Ezzat, “Countdown to the unknown,” *Al-Ahram Weekly*, June 14–20, 2012.

36 Mohamed Fahmy Menza, *Patronage Politics in Egypt: The National Democratic Party and the Muslim Brotherhood in Cairo* (New York: Routledge, 2013).

Shafiq won the second spot in the run-off by successfully activating the NDP's old networks of local notables to bring voters to the polls, especially in rural areas or military strongholds, such as Menoufia.³⁷ Of course, neither candidate depended solely on patronage. Morsi could count on the ideological voters supporting the Muslim Brotherhood, and he also sought to rally revolutionaries to his side by arguing that Shafiq represented the continuation of Mubarak's regime. Shafiq, on the other hand, attempted to mobilize Egyptians who feared the Islamists.³⁸ Nonetheless, the choice of candidates more closely resembled Egypt's pre-2011 elections than the ideologically-diverse first round. Ultimately, Morsi's coalition prevailed narrowly in the run-off, winning 51.7 percent of the vote. Morsi was officially declared the country's first freely-elected president in late June 2012, despite last-minute machinations by the military to avoid this outcome.

Voter Participation in the 2012 Presidential Election

Who actually participated in these transitional elections? Did turnout patterns persist from Egypt's authoritarian elections, or did the political opening bring new groups into the political process? Contrary to the patterns found in many authoritarian regimes, one of the most consistent findings in the literature on voting in democratic political systems is that voters who are more educated and wealthier are more likely to participate in elections.³⁹ If not done in exchange for direct payments, voting can often be a costly activity: it requires

37 Laila Fadel, "Ahmed Shafiq, prime minister under Mubarak, could be Egypt's next president." *Washington Post*, June 9, 2012; Peter Schwartzstein, "The Making of Egypt's Presidents: Letter from Menoufia," *Foreign Affairs*, December 9, 2016, <https://www.foreignaffairs.com/articles/egypt/2016-12-09/making-egypts-presidents>.

38 David D. Kirkpatrick, "Egyptian is Counting on Worries of Elites," *The New York Times*, May 27, 2012; Kirkpatrick and Fahim, May, 2012.

39 For examples of this extensive literature, see: Bingham G. Powell, "American Voter Turnout in Comparative Perspective," *American Political Science Review* 80, no. 1 (1986): 17–40; John E. Filer, Lawrence W. Kenny, and Rebecca B. Morton, "Redistribution, income, and voting," *American Journal of Political Science* 37 (1993): 63–87; William A. Galston, "Political Knowledge, Political Engagement, and Civic Education," *Annual Review of Political Science* 4 (2001); Henry E. Brady, Sidney Verba, and Kay Lehman, "Beyond SES: A Resource Model of Political Participation," *American Political Science Review* 89, no. 2 (1995): 271–294; Arend Lijphart, *Patterns of Democracy* (New Haven: Yale University Press, 1999); Sarah Birch, "Perceptions of Electoral Fairness and Voter Turnout," *Comparative Political Studies* 43, no. 2 (2010): 1601–1622.

citizens to navigate bureaucratic hurdles, choose between the ideological platforms of candidates, and take the time to go to the polls. Education and wealth can provide voters with the resources and knowledge to mitigate these costs.⁴⁰

Despite the strength of this relationship in the literature, however, it is not immediately clear that we should expect to see drastic changes in turnout patterns directly following a democratic opening. In other words, the patronage-oriented turnout patterns characteristic of authoritarianism in poor developing countries with weak states may persist after a transition away from authoritarian rule.⁴¹ Moreover, in countries where the potential tax exposure of the rich is low, the rich are less likely to vote than the poor.⁴² Few studies have explored turnout patterns in the same country directly following a transition to more democratic elections, so the extent to which shifts occur quickly largely remains an open question.⁴³

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- 40 Steven J. Rosenstone, "Economic Adversity and Voter Turnout," *American Journal of Political Science* (1982): 25–46; Steven J. Rosenstone and John Mark Hansen, *Mobilization, Participation, and Democracy in America* (New York: Macmillan Publishing Company, 1993); Rachel Milstein Sondheimer and Donald P. Green, "Using experiments to estimate the effects of education on voter turnout," *American Journal of Political Science* 54, no. 1 (2009): 174–189; Sunshine D. Hillygus, "This missing link: Exploring the relationship between higher education and political engagement," *Political Behavior* 27, no. 1 (2005): 25–47.
- 41 Allen Hicken, "Clientelism," *Annual Review of Political Science* 14 (2011): 289–310.
- 42 Kimuli Kasara and Pavithra Suryanarayan, "When do the rich vote less than the poor and why? Explaining turnout inequality across the world," *American Journal of Political Science* 59, no. 3 (2015): 613–627.
- 43 Klesner and Lawson, in their study of Mexico during the 1980s and 1990s, provide an exception. They show that more educated and middle-class voters were increasingly more likely to vote over the course of Mexico's gradual democratic transition. See: Joseph Klesner and J. Chappell Lawson, "Adios to the PRI? Changing voter turnout in Mexico's political transition," *Mexican Studies/Estudios Mexicanos* 17, no. 1 (2001): 17–39. In addition, some cross-national studies have examined turnout patterns in the post-authoritarian and post-communist contexts of Latin America and Eastern Europe, but these studies largely compare across countries rather than over time in the same country, and they are unable to leverage sub-national variation. See: Aníbal Pérez-Liñán, "Neoinstitutional accounts of voter turnout: Moving beyond industrial democracies," *Electoral Studies* 20:2 (2001): 281–297; Carolina A. Fornos, Timothy J. Power, and James C. Garand, "Explaining voter turnout in Latin America, 1980 to 2000," *Comparative Political Studies* 37, no. 8 (2004): 909–940; Tatiana Kostadinova, "Voter turnout dynamics in post-communist Europe," *European Journal of Political Research* 42 (2003): 741–759; Alexander C. Pacek, Grigore Pop-Eleches, and Joshua A. Tucker, "Disenchanted or discerning: Voter turnout in post-communist countries," *The Journal of Politics* 71, no. 2 (2009): 473–491. There have also been studies examining changes in turnout within countries; scholars have noted that turnout increases

Why does it matter whether turnout patterns changed from those observed under authoritarianism during Egypt's brief democratic interlude? A shift in Egypt's turnout patterns would have indicated the potential for important developments in the country's political system. First, patronage-based voting is often associated with an array of negative consequences, from increased corruption to decreased investment in national public goods.⁴⁴ Higher turnout among more educated and wealthier voters would be indicative of a diminished role for patronage-based voting, since such voters are harder (i.e., more expensive) to buy off. Second, an influx of more educated and middle-class voters would signal the inclusion of new political constituencies that had generally avoided participation under Mubarak's regime. Studying the participation patterns of these constituencies in the country's nascent democratic institutions therefore reveals important information about how these constituencies viewed and engaged with the transition process.

We also move beyond voter turnout as the sole measure of political participation in elections and explore how participation patterns more broadly shifted as the choices available to the voters changed during the transition. In addition to turnout, we examine patterns of spoiled ballots in the election, since the boycott advocated by Sabahi and other activists included casting protest votes during the second round. An increase in spoiled ballots consequently serves as another indication of the alienation of key constituencies from the new electoral process. Given the failure of Egypt's recent move toward democracy, such shifts could potentially provide insights into why the country's young democratic institutions broke down so quickly.

We study these questions using district-level data from Egypt's 2006 census and the two rounds of the presidential election. We focus on the presidential election in particular, as opposed to the March 2011 referendum or the 2011 parliamentary elections, because of the availability of more fine-grained data that permits more precise statistical analysis, as well as the ability to analyze changes in turnout patterns over a short period of time between the two rounds of the election.⁴⁵

in runoff elections the more competitive the first round is, which may explain why overall participation increased in the second round of the 2012 presidential election in Egypt. See Sebastian Garmann, "A note on electoral competition and turnout in run-off electoral systems: Taking into account both endogeneity and attenuation bias," *Electoral Studies* 34 (2014): 261–265; Indridi H. Indridason, "Competition & turnout: the majority run-off as a natural experiment," *Electoral Studies* 27, no. 4 (2008): 699–710.

44 Hicken, 2011.

45 We could not access low-level data for the 2011 referendum. Data for the 2011 parliamentary elections was only available online and from the official documents published by the

To preview our findings, we show that voters in more educated and urban districts were more likely to participate in the election, reversing turnout patterns under the previous authoritarian regime. However, these relationships weakened in the second round of the election, when many educated and urban districts experienced declining turnout levels despite an overall increase in voter participation. Indicative of the alienation of more educated and wealthier voters after the first round, these same districts also saw a meaningful spike in spoiled ballots during the second round of the election. The findings suggest that turnout patterns can shift quickly as regime type changes, but that such shifts are partially contingent on the choice of candidates provided to voters.

Demographic and Electoral Data

We analyze turnout and spoiled ballots in the 2012 elections using scatterplots to illustrate bivariate relationships and OLS regressions with control variables to assess the robustness of the patterns to potential omitted variable bias.⁴⁶ While using aggregated rather than individual level data has drawbacks, our unit of observation for the analysis is at the district level, and we find the results are robust to use of ecological inference methods (See Appendix).⁴⁷ To conduct this analysis, we collected district-level data from the 2006 Egyptian Census and both rounds of the country's 2012 presidential election.⁴⁸ Data on the election results was taken from official numbers released by Egypt's Supreme Committee for Elections.⁴⁹ We matched the census districts with

High Electoral Commission at a higher level of aggregation, as the parliamentary elections were conducted in larger districts.

46 We cluster standard errors by the larger parliamentary districts ($N = 46$), since the errors might plausibly be correlated as a result of similar mobilizational dynamics and networks in these areas as a result of the recent parliamentary elections.

47 Despite potential issues with ecological inference (using aggregated data to support claims about individual-level behavior), our use of district-level observations to discuss voting patterns is consistent with much of the voter turnout literature in political science, for which scholars have frequently relied on community-level data. See Benny Geys, "Explaining Voter Turnout: A Review of Aggregate-Level Research," *Electoral Studies* 25 (2006): 637–663. Our results are consistent when using methods for ecological inference. Those results are available in the Appendix.

48 Egypt, Central Agency for Public Mobilization and Statistics (CAPMAS), *Population, Housing, and Establishments Census, 2006*.

49 Supreme Committee for Elections, Presidential Elections Official Site, 2012. This organization is also referred to as the High Elections Commission, the High Electoral Commission, or some variant thereof. See <http://pres2012.elections.eg/>.

the electoral districts (*qism/markaz*) using electoral lists published by the Egyptian government. We were able to match approximately 94 percent of the districts through matching by names, so our final data includes 328 district-observations.⁵⁰ Table 2 provides summary statistics for our demographic and political variables in 328 districts across Egypt's twenty-seven governorates. We discuss each of these variables below.

The four dependent variables in our analysis provide measures of district-level participation for the election: turnout percentage in both rounds, the

TABLE 2 *Summary statistics*

	Mean	Standard Deviation	Min	Max
Demographic Variables				
No Education (%)	38.9	14.0	4.0	77.4
Higher Ed (%)	11.0	9.6	0.7	56.9
Urbanization (%)	54.3	41.3	0.0	100.0
Unemployed (%)	9.5	4.2	0.4	23.5
Population (Log)	11.8	1.2	7.6	14.0
Male (%)	51.7	3.7	37.3	92.2
Youth (%)	35.2	6.8	3.8	50.8
Never Married (%)	29.2	5.0	16.9	63.0
Political Variables				
Turnout R1 (%)	46.4	12.3	15.3	72.9
Turnout R2 (%)	51.1	9.8	18.4	74.1
Turnout Change (%)	4.6	5.5	-14.3	18.0
Spoiled R1 Vote (%)	0.8	0.3	0	2.8
Spoiled R2 Vote (%)	1.7	0.8	0	5.6
Spoiled Change (%)	0.9	0.9	-0.8	5.3
Opp 1984 Seats (%)	14.0	12.6	0	50
Par 2011 Turnout (%)	58.0	16.5	19.3	84.5
Morsi R1 Vote (%)	25.2	11.2	4.0	62.3
Shafiq R1 Vote (%)	20.9	11.9	0.5	61.8
Sabahi R1 Vote (%)	18.9	13.0	0.5	77.2

Note: 328 district-level observations

50 In the 2006 census, there is a total of 346 precincts. There are 351 electoral districts in the 2012 presidential election. We matched the districts by hand because of administrative and name changes.

change in the turnout percentage between the first and second round, spoiled ballot percentages in both rounds, and the change in the percentage of spoiled ballots between the first and second round. For each district, the elections data includes the aggregate number of votes for every candidate, the number of invalid (spoiled) ballots, and the number of registered voters. To measure turnout, we divided the sum of good and spoiled ballots by the number of registered voters. Likewise, to measure the percentage of spoiled ballots, we divided the total number of spoiled ballots by the number of registered voters. Conveniently, the registered voter numbers are equal to eligible voters, because Egyptians eighteen years or older were automatically registered to vote through their national ID cards for the post-revolution elections.⁵¹ This measure of turnout adheres to the political science literature on voter participation: the majority of studies define turnout as the percentage of either registered or eligible voters.⁵² Figure 1 displays the substantial variation in

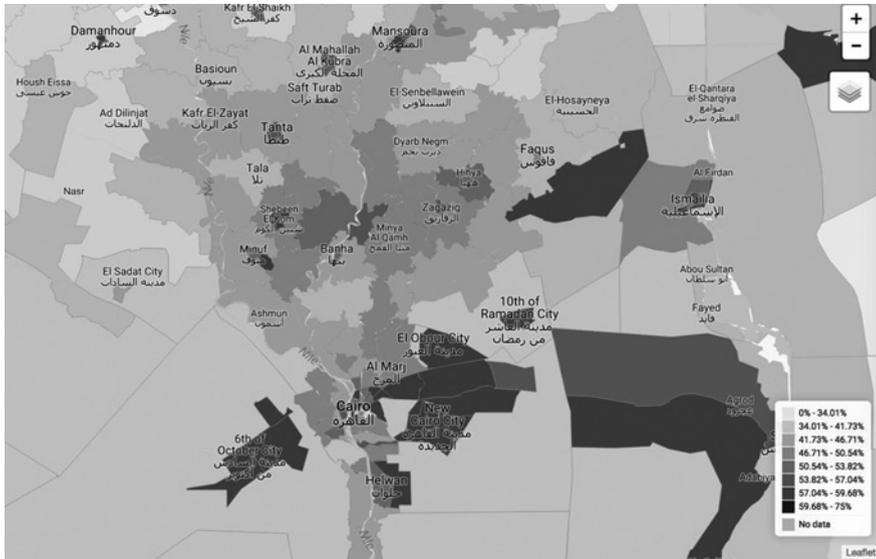


FIGURE 1 Round 1 turnout⁵³

51 Elise Hegelson, “Learning a lesson from Egypt’s universal voter registration?” *FairVote*, December 7, 2011, <http://www.fairvote.org/learning-a-lesson-from-egypt-suniversal-voter-registration>, Accessed October 29, 2016.

52 Geys, 2006.

53 Maps constructed by authors in collaboration with Christian Font and Seth Yastrov. Maps for most variables at the district level are publicly available online at <https://www.alexandrablackman.com/mapping-cairo>.

turnout across Egypt in round one. To construct our variable for the change in turnout percentage between the two rounds, we subtracted the turnout percentage in the first round from the turnout percentage in the second round. The variable for the change in the percentage of spoiled ballots was constructed in the same way.

For our independent variables, we are most interested in how district levels of education and urbanization correlate with participation patterns in the election.⁵⁴ To measure districts' education and urbanization levels, we created three variables using the 2006 census data: (1) the percentage of individuals in each district who had completed university or an advanced degree (referred to as higher education); (2) the percentage of individuals who were illiterate or had never received any formal education (referred to as no education); and (3) the percentage of individuals who lived in an urban setting.⁵⁵ The census contains the aggregate numbers of Egyptians in each district who fall into these categories.⁵⁶ We generated the percentages by dividing them into the relevant aggregate population number for the district. To create the percentages for the education variables, we used the total population above the age of ten as the denominator, which is the standard education measure used by the Egyptian government. For the urban–rural divide, we generated the percentage based on the total population in the district.

We include several demographic and political variables as controls in the analysis. We control for the log of the districts' total population, since scholars have suggested that residents of smaller, more tightly-knit communities may be more likely to vote.⁵⁷ The percentage of men in each district is included as well, because in some contexts men appear to vote more frequently,⁵⁸ and

54 We consider urbanization to be a relatively good proxy of middle-class districts, given the wealth divide between Egypt's rural and urban areas. See Dean Joliffe, Gaurav Datt, and Manohar Sharma, "Robust poverty and inequality measurement in Egypt: correcting for spatial-price variation and sample design effects," *Review of Development Economics* 8, no. 4 (2004): 557–572.

55 While there is a six-year gap between the census and the post-revolution presidential election, it is unlikely that districts changed in fundamental ways in this period. According to the World Bank, internal migration in Egypt is low by international standards. See Santiago Herrera and Karim Badr, "Internal Migration in Egypt," *The World Bank* (2012).

56 For the no education variable, we added together the number of individuals in each district who were classified as illiterate or without any formal education.

57 Geys, "Explaining Voter Turnout," 2006.

58 Andre Blais, Elisabeth Gidengil, and Neil Nevitte, "Where does turnout decline come from?" *European Journal of Political Research* 43, no. 2 (2004): 221–236.

restrictive gender norms in Egypt could have made it more difficult for women to vote. We also control for the percentage of youth in the district, since younger people often participate less in politics (though in revolutionary Egypt in which younger activists were especially involved, we might expect the opposite pattern).⁵⁹ We also include controls for the percentage of unemployed and the percentage of individuals who have never married; both measures reflect major sources of social strain in Egypt that might affect the propensity to participate electorally.⁶⁰

Politically, we control for the first-round vote percentages of the three leading candidates: Morsi, Shafiq, and Sabahi. These variables allow us to account for the ideological leanings of each district, which might correlate with the independent variables of interest as well as turnout. In addition, we control for the turnout percentage in the 2011 parliamentary elections, since turnout patterns in the two contests were likely correlated. The number of parliamentary districts was much smaller (fewer than fifty districts), so we matched each presidential district to the larger unit of which it was a part. Finally, we include the percentage of seats won by the opposition in the 1984 parliamentary elections, which were Egypt's first semi-competitive elections under Mubarak's regime. Blaydes shows that these elections were consequential for later government distribution of public goods that may influence how citizens view the regime.⁶¹ Moreover, a history of voting for the opposition may have been correlated with higher turnout following the revolution. This measure is calculated at the governorate-level.

In some of the regression models, governorate fixed effects are also included. The use of fixed effects controls for all time-invariant characteristics that are constant at the governorate level, transforming the analysis into a comparison of the relationships within governorates and thereby providing a particularly strong robustness check for the results.

59 The youth figure is the percentage of the district that is under 16, which is lower than the voting age. We assume that a higher percentage of those under 16 correlates with a higher percentage of younger voters. Unfortunately, it is not possible to isolate more specific age ranges from our census data.

60 The male and youth variables are created using the total population in that district as the denominator. The unemployment percentage variable is created by dividing the total number of unemployed individuals by the total number of individuals reported to be in the workforce in the district. The denominator for the unmarried variable is the number of individuals over the legal marriage age.

61 Blaydes, 2011.

Turnout Patterns in Rounds 1 and 2

Figure 2 shows the bivariate relationships between districts' voter turnout percentages in the first and second rounds and the district percentages for (1) higher education, (2) no education, and (3) urbanization. The plots show a positive association between higher education and turnout in both rounds and a negative association between the no education percentage and turnout. In the second round of voting, these relationships remain but appear to have weakened. Plot 3 suggests a positive relationship between urbanization and voting in the first round and no relationship in the second.

Moreover, as shown in the OLS regressions in Table 3, these general patterns persist even when controlling for other variables that might relate to both turnout and the independent variables of interest at the district-level. For both rounds of the election, column A in Table 3 reports results in which only the education and urbanization variables are included, column B shows the results with control variables added in as well, and column C also incorporates governorate fixed effects.

When controlling for other factors that might explain turnout patterns, the coefficients for the higher education and no education variables continue to be statistically significant and substantively meaningful across the three specifications for the first round. Based on the fixed effect models, a typical within-governorate shift in higher education is correlated with a 1.73 percent increase in turnout, while a typical within-governorate shift in no formal education

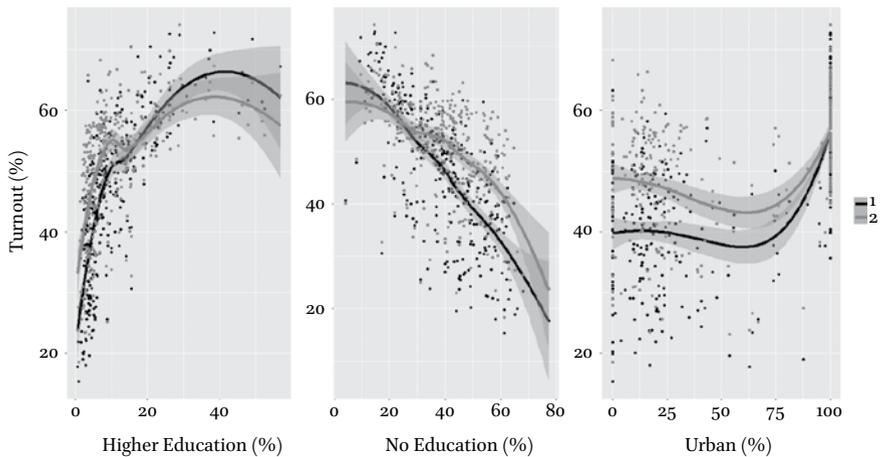


FIGURE 2 *Turnout in rounds 1 and 2*

TABLE 3 *District turnout in 2012 Egyptian presidential election*

	Round 1 (A)	Round 1 (B)	Round 1 (C)	Round 2 (A)	Round 2 (B)	Round 2 (C)
Higher Ed (%)	0.358** (0.145)	0.255*** (0.095)	0.219*** (0.058)	0.192 (0.137)	0.107 (0.080)	0.059 (0.046)
No Formal Ed (%)	-0.332** (0.147)	-0.468*** (0.087)	-0.528*** (0.064)	-0.239 (0.156)	-0.430*** (0.074)	-0.533*** (0.072)
Urbanization (%)	0.049* (0.027)	0.021 (0.017)	0.012 (0.014)	0.007 (0.029)	0.011 (0.015)	0.010 (0.012)
Population (Log)		-0.494 (0.712)	-1.419*** (0.424)		0.272 (0.695)	-0.653 (0.410)
Unemployed (%)		-0.320** (0.145)	-0.079 (0.094)		-0.283** (0.124)	-0.022 (0.085)
Male (%)		-0.567** (0.243)	-0.315* (0.170)		-0.602*** (0.199)	-0.326** (0.148)
Youth (%)		-0.176 (0.182)	0.608*** (0.108)		-0.066 (0.167)	0.533*** (0.095)
Never Married (%)		-0.292 (0.183)	0.321*** (0.102)		-0.218 (0.165)	0.273*** (0.087)
Morsi R1 Vote (%)		0.262*** (0.081)	0.110 (0.082)		0.338*** (0.078)	0.204*** (0.065)
Shafiq R1 Vote (%)		0.246*** (0.063)	0.138* (0.073)		0.358*** (0.058)	0.232*** (0.067)
Sabahi R1 Vote (%)		0.216*** (0.056)	0.153 (0.091)		0.079 (0.050)	-0.086 (0.073)
Par 2011 Turnout (%)		0.166*** (0.036)	0.077** (0.034)		0.158*** (0.039)	0.053** (0.025)
Opp 1984 Seats (%)		0.032 (0.059)			0.005 (0.050)	
Constant	52.734*** (8.310)	87.913*** (21.238)	60.483*** (15.031)	57.895*** (8.926)	78.745*** (19.994)	62.224*** (13.339)
Governorate FE	No	No	Yes	No	No	Yes
Observations	327	307	307	327	307	307
Clusters	46	44	44	46	44	44
R-Squared	0.558	0.726	0.872	0.276	0.630	0.833

Note: Dependent variable is turnout percentage.

***p < 0.01, **p < 0.05, *p < 0.10

Standard errors are clustered by districts from the 2011 parliamentary elections.

variable is associated with a 6.43 percent decrease in turnout.⁶² The coefficient for the urbanization coefficient is statistically significant in column A, but loses significance in the models with additional control variables.

The weakened relationships in the second round that are visible in the plots also appear in the regression results, particularly for the higher education variable. In contrast to the first round, the higher education coefficient is not significant in any of the three models, and the magnitude of the coefficient is reduced substantially. The urbanization variable loses significance in column A and becomes substantively smaller as well relative to the first round. The coefficient for the no education rate shows the least change, suggesting that higher levels of low education are associated with reduced turnout in both rounds, even with controls. Though the coefficient is noticeably smaller in column A relative to the first round, the magnitude is similar in columns B and C, and the coefficient remains significant in the latter two specifications.

Put simply, these results suggest that more educated and urban districts turned out a higher percentage of their voters in the presidential election, while districts with more uneducated and rural voters experienced lower turnout rates on average. These patterns would be expected in many mature democracies, and they reveal a major shift in who turned out to vote from authoritarian elections under Mubarak. While vote buying and other patronage tactics were almost certainly used by all candidates in the election, the fact that turnout was lowest in areas where vote buying would be cheapest—and therefore most effective—implies that ideological voting played a relatively more important role in shaping who participated in the election. Nonetheless, the relationships appear to have weakened in the second round, once the choice of candidates became more limited in a manner that reflected the country's pre-revolution political divide. These results are supported by the ecological inference results presented in the Appendix.

Changes in Voter Participation between Rounds 1 and 2

To analyze more systematically how turnout patterns changed between the rounds, we look directly at the variable for turnout change between rounds one and two as our dependent variable. Figure 3 illustrates the bivariate

62 A typical shift is calculated by multiplying the coefficient of the specific education variables by the standard deviation of the *within-governorate* variation of the education variables. See: Jonathan Mummolo and Erik Peterson, "Evaluating the Substantive Significance of Fixed Effects Models," *Working Paper*.

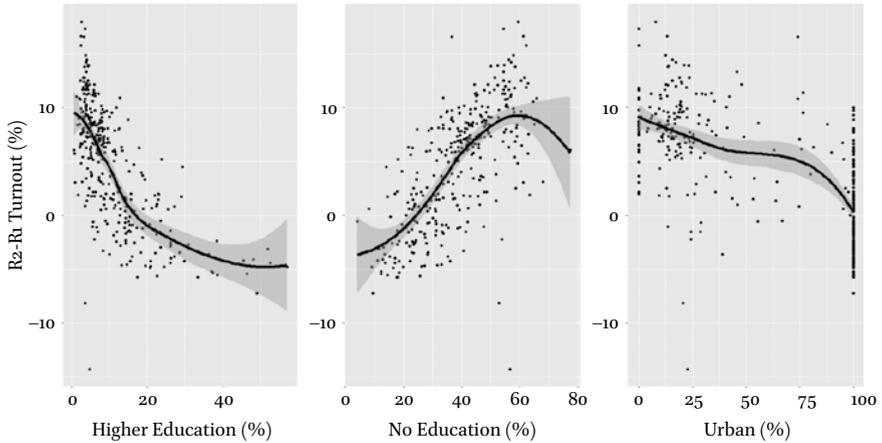


FIGURE 3 *Percentage point change in turnout by district*

relationships between the districts' percentage point change in turnout and the percentages for (1) higher education, (2) no education, and (3) urbanization. The patterns revealed by the plots are strong. Consistent with the results in Table 4 below, there appear to be negative associations between higher education, urbanization, and turnout change. Turnout was more likely to decrease in districts with more college graduates and urban residents, but was more likely to increase in areas with few college graduates and more rural residents. In fact, nearly all rural districts experienced increases, and almost all of the districts with decreases were fully urban. In addition, no district in which more than 30 percent of the residents had completed university or an advanced degree experienced an increase in turnout in the second round. The figure also shows a strong positive association between turnout change and the no education rate, implying that districts with more uneducated voters were more likely to experience increases in turnout in the second round.

The regression results reported in Table 4 are consistent with the patterns in Figure 3. The table shows the results for the same model specifications as in Table 3, but here the dependent variable is turnout change. The association with turnout change is strongest for the higher education rate: the coefficient is significant at the .01 level in all three specifications and is substantively meaningful as well. The coefficient for urbanization is statistically and substantively significant in model A but loses significance in models B and C. The coefficient for no education is positive and significant in the first column. It loses significance when the controls and governorate fixed effects are included in models B and C.

TABLE 4 *Changes in district turnout between rounds 1 and 2*

	(A)	(B)	(C)
Higher Ed (%)	-0.166*** (0.035)	-0.148*** (0.030)	-0.160*** (0.039)
No Formal Ed (%)	0.092** (0.036)	0.038 (0.028)	-0.005 (0.040)
Urbanization (%)	-0.042*** (0.008)	-0.010 (0.006)	-0.002 (0.005)
Population (Log)		0.766*** (0.268)	0.766*** (0.181)
Unemployed (%)		0.038 (0.052)	0.057 (0.044)
Male (%)		-0.035 (0.067)	-0.011 (0.069)
Youth (%)		0.110* (0.064)	-0.075 (0.071)
Never Married (%)		0.074 (0.054)	-0.048 (0.057)
Morsi R1 Vote (%)		0.076** (0.030)	0.093** (0.042)
Shafiq R1 Vote (%)		0.111*** (0.021)	0.094*** (0.026)
Sabahi R1 Vote (%)		-0.136*** (0.016)	-0.239*** (0.052)
Par 2011 Turnout (%)		-0.008 (0.014)	-0.024 (0.018)
Opp 1984 Seats (%)		-0.027 (0.017)	
Constant	5.161*** (1.644)	-9.168 (7.914)	1.741 (8.201)
Governorate FE	No	No	Yes
Observations	327	307	307
Clusters	46	44	44
R-Squared	0.562	0.821	0.898

Note: Dependent variable is turnout percentage point change.

***p < 0.01, **p < 0.05, *p < 0.10

Standard errors are clustered by 46 districts from the 2011 parliamentary elections.

Overall, these results show that when the choice of candidates was restricted to Morsi and Shafiq in round two, districts with more highly educated and urban voters were more likely to experience declines in turnout. On the other hand, districts with more uneducated and rural voters saw large increases in turnout on average. These dual results are consistent with the idea that both the Morsi and Shafiq campaigns invested heavily in turning out rural networks of voters through patronage and clientelistic ties, while some voters associated with the core groups of the revolutionary coalition felt excluded from the process and decided to stay home in the second round.

Spoiled Ballots in Rounds 1 and 2

To explore further the idea that changing turnout patterns in the second round of the election reflected the alienation of voters associated with the revolutionary coalition, we look at the percentage of spoiled ballots in each district. Spoiled ballots may result from voters making unintentional mistakes, or from deliberate decisions to invalidate the ballot as a protest. Mistakes may occur with an element of randomness, but to the extent that patterns emerge, they should be more common in areas with low levels of educational attainment, since voters with less education may have a more difficult time handling their ballots.⁶³ If spoiled ballots in the election resulted primarily from mistakes, the correlations with higher education and urbanization should be weak or negative. On the other hand, a positive relationship with these variables would be indicative of a deliberate protest vote meant to signal dissatisfaction with the existing political system.

Figure 4 displays the bivariate relationships between the percentage of spoiled ballots from registered voters in each district and (1) higher education, (2) no education, and (3) urbanization. In the first round, the plots suggest little relationship with the percentage of spoiled ballots. As expected, the higher education and urbanization variables appear to be negatively correlated with spoiled ballots, and the no education variable appears to be positively correlated. However, the substantive relationship is miniscule. These patterns are consistent with spoiled ballots in the first round resulting primarily from voter mistakes.

A clear shift occurs in the second round of the election. Districts with higher rates of higher education experienced significantly greater percentages of spoiled ballots on average. A similar pattern appears for urban districts. On the

63 Blaydes, 2011.

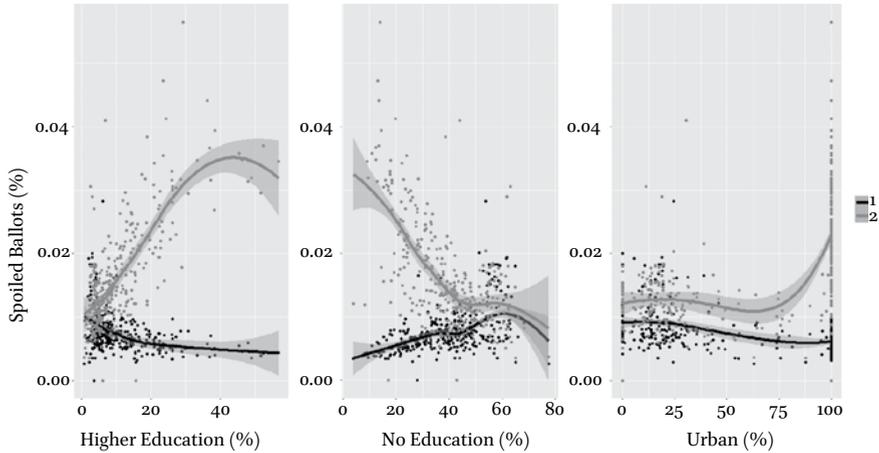


FIGURE 4 Spoiled ballots in rounds 1 and 2

other hand, districts with a higher rate of no education saw significantly lower percentages of spoiled ballots. The percentage of spoiled ballots in any given district still appears small in absolute terms; however, this occurs in part because our measure looks at the percentage of registered voters rather than ballots cast to maintain a stable denominator between the rounds. Among voters who actually turned out to vote in the second round, substantively meaningful percentages cast invalid ballots in many districts. Furthermore, the sharp divergence in the relationships between the rounds suggests that more educated and urban voters were deliberately and strategically spoiling ballots in the second round as part of a protest vote, suggesting their increasing alienation from the democratic process.⁶⁴

These same general patterns appear in the regression models shown in Table 5. For the first round, the magnitude of the coefficients for the higher education, urbanization, and no education variables are near zero, though most are significant, and the higher education coefficient is actually positive. In the second round, however, the coefficient for higher education becomes substantively much larger and statistically more significant, while the no education variable loses significance and becomes negative in two of the three specifications. Based on the fixed effect models, a typical within-governorate shift in high education is not significantly correlated with an increase in spoiled ballots in the first round, while in the second round, a typical within-governorate

64 The results of the ecological inference models in the Appendix offer additional support that more educated voters in particular were casting more spoiled ballots in the second round of the election.

TABLE 5 *Spoiled ballots in rounds 1 and 2*

	Round 1 (A)	Round 1 (B)	Round 1 (C)	Round 2 (A)	Round 2 (B)	Round 2 (C)
Higher Ed (%)	0.005* (0.003)	0.007** (0.003)	0.003 (0.003)	0.060*** (0.010)	0.052*** (0.010)	0.056*** (0.011)
No Formal Ed (%)	0.012*** (0.004)	0.008*** (0.003)	0.008*** (0.003)	0.006 (0.008)	-0.005 (0.006)	-0.001 (0.005)
Urbanization (%)	-0.001* (0.001)	-0.001 (0.001)	-0.001** (0.000)	0.004** (0.002)	0.001 (0.001)	-0.001 (0.001)
Population (Log)		0.020 (0.031)	-0.007 (0.023)		0.003 (0.047)	-0.018 (0.048)
Unemployed (%)		-0.001 (0.006)	0.000 (0.005)		-0.021*** (0.006)	-0.017*** (0.006)
Male (%)		0.002 (0.007)	-0.015 (0.017)		-0.048*** (0.011)	-0.042** (0.018)
Youth (%)		-0.003 (0.006)	0.001 (0.006)		-0.006 (0.010)	0.023* (0.012)
Never Married (%)		-0.004 (0.007)	-0.006 (0.007)		0.016 (0.009)	0.033*** (0.009)
Morsi R1 Vote (%)		0.016*** (0.006)	0.009** (0.003)		0.010* (0.005)	0.010 (0.006)
Shafiq R1 Vote (%)		0.004 (0.003)	0.003 (0.002)		0.002 (0.004)	0.003 (0.006)
Sabahi R1 Vote (%)		0.002 (0.002)	0.007** (0.003)		0.006 (0.005)	0.027*** (0.008)
Par 2011 Turnout (%)		0.001 (0.002)	0.004*** (0.001)		0.006** (0.002)	0.010*** (0.003)
Opp 1984 Seats (%)		-0.001 (0.002)			0.009** (0.004)	
Constant		-0.332 (1.016)	0.676 (0.963)		2.833** (1.144)	0.776 (1.196)
Governorate FE	No	No	Yes	No	No	Yes
Observations	327	307	307	327	307	307
Clusters	46	44	44	46	44	44
R-Squared	0.299	0.389	0.658	0.563	0.625	0.722

Note: Dependent variable is turnout percentage.

***p < 0.01, **p < 0.05, *p < 0.10

Standard errors are clustered by districts from the 2011 parliamentary elections.

shift in the higher education variable is associated with a .44 percent increase in spoiled ballots. Inversely, a typical within-governorate shift in no formal education is correlated with a 0.097 percent increase in spoiled ballots in the first round but not significant in the second round. While these effect sizes appear substantively small at the district level, they indicate that there was a perceptible and systematic shift in where spoiled ballots were cast. Again, these results are supported by the results of the ecological inference models presented in the Appendix.

Changes in Spoiled Ballots between Rounds 1 and 2

To assess more directly how spoiled ballots changed between the rounds, we also look at the change in spoiled ballots as our dependent variable. Figure 5 shows the relationship between the districts' percentage point change in spoiled ballots and (1) higher education, (2) no education, and (3) urbanization. Consistent with the protest vote story, highly educated districts and urban districts were more likely to see increases in the percentage of spoiled ballots in the second round of the election.

Table 6 shows the results of the OLS regression models with the percentage point change in spoiled ballots as the dependent variable. The results are generally consistent with the patterns in Figure 5. In particular, the coefficient for higher education is significant at the .01 level and is relatively large across the three models. The coefficient on urbanization is positive and significant in model A as expected, but it weakens and loses significance in the remaining

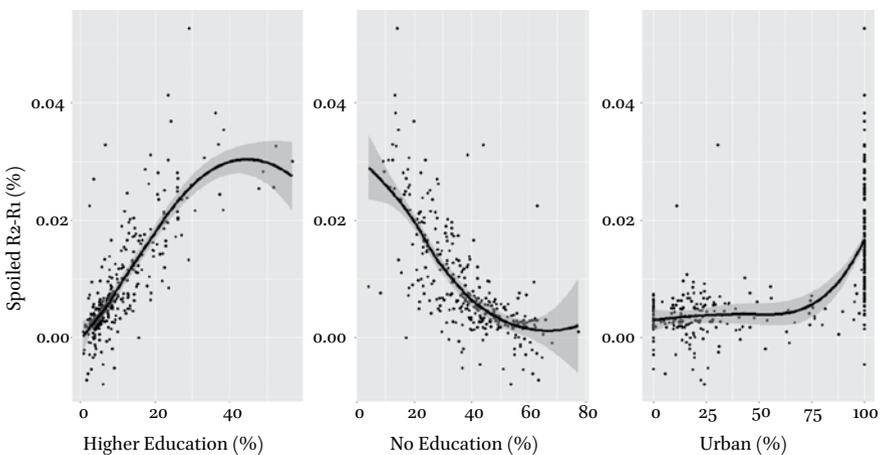


FIGURE 5 Percentage point change in spoiled ballots by district

TABLE 6 *Changes in spoiled ballots between rounds 1 and 2*

	(A)	(B)	(C)
Higher Ed (%)	0.055*** (0.009)	0.045*** (0.008)	0.053*** (0.010)
No Formal Ed (%)	-0.006 (0.006)	-0.014** (0.006)	-0.009* (0.005)
Urbanization (%)	0.005*** (0.001)	0.001 (0.001)	0.000 (0.001)
Population (Log)		-0.016 (0.042)	-0.011 (0.041)
Unemployed (%)		-0.020*** (0.006)	-0.017** (0.007)
Male (%)		-0.051*** (0.013)	-0.027* (0.015)
Youth (%)		-0.003 (0.011)	0.022* (0.012)
Never Married (%)		0.020* (0.010)	0.038*** (0.009)
Morsi R1 Vote (%)		-0.006* (0.003)	0.000 (0.004)
Shafiq R1 Vote (%)		-0.002 (0.004)	-0.000 (0.005)
Sabahi R1 Vote (%)		0.004 (0.005)	0.020*** (0.006)
Par 2011 Turnout (%)		0.004* (0.003)	0.007** (0.003)
Opp 1984 Seats (%)		0.010** (0.004)	
Constant	0.247 (0.343)	3.165*** (1.114)	0.100 (1.126)
Governorate FE	No	No	Yes
Observations	327	307	307
Clusters	46	44	44
R-Squared	0.678	0.740	0.801

Note: Dependent variable is spoiled ballot percentage point change.

***p < 0.01, **p < 0.05, *p < 0.10

Standard errors are clustered by 46 districts from the 2011 parliamentary elections.

two columns. The coefficient for no formal education is negative and significant. These results suggest that more educated and urban districts were not only more likely to experience declining turnout in the second round, but that they were also more likely to experience a spike in protest votes among voters who did participate in the election.

Political Alienation and the Failure of Egypt's Transition

Declines in turnout and an increase in spoiled ballots among districts with more educated and urban voters in the second round of the 2012 election suggest that Egyptians who could have formed a key constituency in support of the democratic transition were instead increasingly alienated from the country's political process as a result of the electoral outcome of the first round. Turnout patterns from the first round suggest that voters aligned with the revolutionary camp participated in large numbers; however, the results reinforced the frustration of revolutionaries who had already struggled electorally in the 2011 constitutional referendum and parliamentary elections. Many of these groups had been skeptical of moving quickly toward electoral politics following the revolution, fearing that the Brotherhood's organizational capacity would propel it to victory. The patterns illustrated in this paper support the idea that the loss of the presidential election accelerated their alienation from the democratic process: even as overall turnout increased in the second round, many of these voters appear to have decided to stay home or spoil their ballots deliberately.

Following the election, there was a growing tendency by those in the various non-Islamist camps to work outside of the country's new democratic institutions and, eventually, to reject their legitimacy altogether. After Morsi's confirmation as the president, Sabahi himself reportedly turned down an offer to work with the administration as one of its vice presidents.⁶⁵ Over the next several months, many of the non-Islamist members of the Constituent Assembly, encouraged by Sabahi and other revolutionary and non-Islamist political leaders, resigned and increasingly attempted to short-circuit the process of drafting a new constitution by fighting it in the courts, claiming that the Islamists held undue influence.⁶⁶ This strategy contributed to the development

65 Mohamed Elmsary, "Morsi myths: Re-examining justifications for Egypt's coup," *Middle East Eye*, July 3, 2015.

66 William Partlett, "Constitution-Making by 'We the Majority' in Egypt," *Brookings Institution*, November 30, 2012; "Six More Constituent Assembly members resign after Morsy

of a constitutional crisis in November, when Morsi responded to the possibility of the courts disbanding the Constituent Assembly by nullifying their authority and forcing through the new constitution. The resulting power struggle between Morsi and his opponents increasingly took place in the streets—in part because there was no legislative body to work through—and eventually led to Morsi's ouster by the military on July 3, 2013. While it is not possible to say whether a better outcome for the transition would have occurred otherwise, it seems likely that the dynamics of the presidential election contributed to the later democratic breakdown by exacerbating the alienation of constituencies important for democratic consolidation.

Conclusion

Which districts turned out to vote in Egypt's 2012 presidential election, as the country attempted to transition away from the authoritarian regime of Hosni Mubarak? Whereas participation in Egypt's authoritarian elections was strongest in impoverished, rural districts with low levels of education, the opposite pattern held during the country's transitional phase. As we demonstrate in this paper, on average turnout was significantly higher in districts with more education and urbanization. These patterns are consistent with the existing literature on turnout in developed democracies, indicating that turnout in transitional elections can break significantly with earlier electoral patterns. Importantly, these results also show that who participates in elections can shift quickly as voters' choices change following a transition to a more democratic political system.

These relationships between turnout, education, and urbanization were strongest in the first round of the presidential election, when voters could choose between twelve candidates representing an array of ideological positions. Once the choice was narrowed down to candidates from the Muslim Brotherhood and the old regime, however, those relationships weakened considerably. While overall turnout increased in the second round, higher education and urbanization rates were no longer associated with higher turnout when controlling for other factors. Between the two rounds, participation increased most in heavily rural districts and districts with low levels of education, while turnout remained flat or even declined in urban areas and those with high rates of university education. Furthermore, in the second round, spoiled ballots increased noticeably in urban and highly educated districts.

decree," *Egypt Independent*, November 25, 2012; Bassem Sabry, "Manal El-Tibi's resignation letter to Egypt's Constituent Assembly," *Ahram Online*, September 26, 2012.

These developments in the second round had troubling implications for Egypt's transition, indicating a decline in support for emerging democratic institutions among the country's non-Islamist forces and likely contributing to the destabilizing political trajectory that ended the transition one year later with a military coup.

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Appendix

As we outlined in the article above, these results, though robust, are subject to the standard critiques of ecological inference (EI) wherein aggregate level data is used to make inferences about individual level data. Although district level turnout and district level demographics are often used in studies of voter turnout, we also use ecological inference methods to examine whether these relationships hold at the individual level.

Following Blaydes, we first use the 2×2 ecological inference methods, using the 'ei' R package developed by King and Roberts.⁶⁷ These methods use data on the overall turnout, as well as the size of a specific population of interest, such as the number of individuals in each district who have received no formal education, to determine, for instance, the logical bounds on the turnout among individuals with no formal education.

67 Blaydes, 2011; Gary King and Molly Roberts, *ei: Ecological Inference*, R package version 1.3-3 (2016): <https://CRAN.R-project.org/package=ei>.

TABLE A.1 *EI results for turnout in 2012 Egyptian presidential election*

	Some Formal Education	No Formal Education	Urban	Rural	Higher Education	No Higher Education
Round 1	0.717 (0.010)	0.092 (0.015)	0.529 (0.007)	0.379 (0.002)	0.988 (0.008)	0.403 (0.001)
Round 2	0.656 (0.011)	0.317 (0.017)	0.552 (0.005)	0.479 (0.001)	0.855 (0.022)	0.479 (0.003)
Observations	328	328	328	328	328	328

Note: Dependent variable is turnout percentage; standard errors are in parentheses.

These results support the OLS results presented in the article. In the first round of the presidential election, 71 percent of individuals with some formal schooling turned out for the vote, while only 9 percent of those without any formal schooling cast a ballot. In round two, these numbers changed to 65 percent and 31 percent respectively. Both the urban and rural turnout increased in the second round (because overall turnout increased), but there was a 10 percent jump in rural turnout compared with only a 2 percent increase in urban turnout. Finally, there was a 13 percent decrease in turnout among highly educated voters between the first and second rounds, accompanied by a 7 percent increase in voting among those with no advanced degree. Figures A.1 and A.2 present these results as plots.

Ecological inference faces several challenges, including issues regarding distributional effects, contextual effects, and aggregation effects. Whether any of these problems holds in this case is difficult to determine given our data. One way to address some of the concerns is to include covariates that may affect the context or aggregation. Accordingly, we also employ ecological inference models that include covariates to account for some of these problems. For each key variable, we rerun the EI analysis using the other two main variables as covariates. For instance, the EI analysis for No Education is rerun including Urbanization and Higher Education covariates. We do this to address concerns, for example, that level of urbanization affects the voting behavior of those with no formal education. In general, we find that the same main relationships hold.⁶⁸

68 These results are available from the authors upon request.

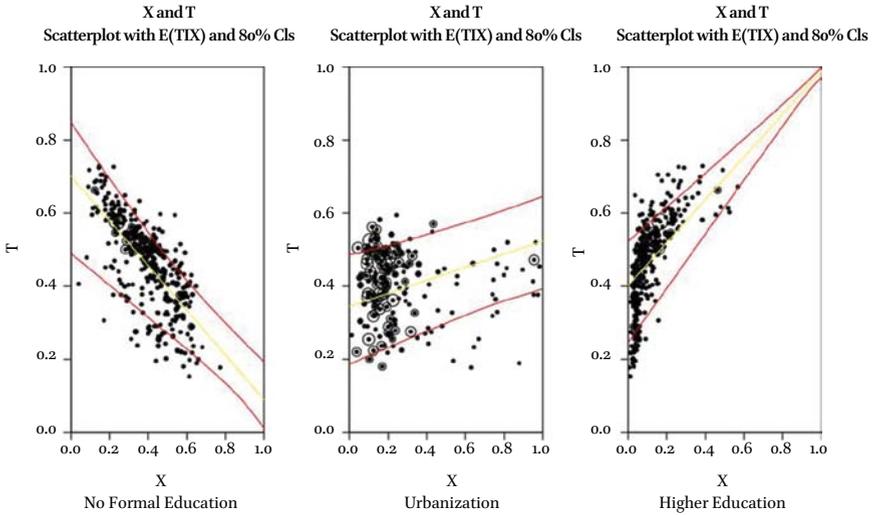


FIGURE A.1 *EI results for round one of the presidential election*

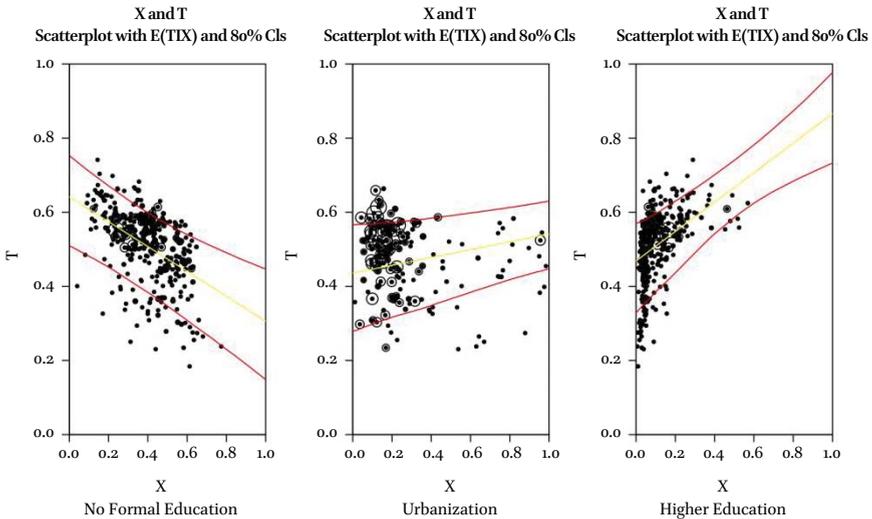


FIGURE A.2 *EI results for round two of the presidential election*

Table A.2 displays the 2×2 EI results for the spoiled ballots. Again these results support the OLS findings. The number of spoiled ballots cast by individuals with some formal education increased from 0.5 percent to over 2 percent between the first and second round. Similarly, the percentage of highly educated individuals who cast spoiled ballots increased by 8 percent points between the

TABLE A.2 *EI results for spoiled ballots in 2012 Egyptian presidential election*

	Some Formal Education	No Formal Education	Urban	Rural	Higher Education	No Higher Education
Round 1	0.0051 (0.0003)	0.0124 (0.0005)	0.0086 (0.0007)	0.0092 (0.0002)	0.0243 (0.0010)	0.0062 (0.0001)
Round 2	0.0254 (0.0002)	0.0039 (0.0002)	0.0147 (0.0011)	0.0127 (0.0003)	0.1070 (0.0018)	0.0062 (0.0002)
Observations	328	328	328	328	328	328

Note: Dependent variable is percentage of spoiled ballots; standard errors are in parentheses.

two rounds, while the percentage of individuals without a higher education who cast a spoiled ballot did not change between the two rounds.

Finally, we want to again emphasize that these EI results rest on a number of assumptions that we cannot fully address given the limitations of our data. We believe that the distributional assumption posited by King is likely to hold in the case of our three independent variables of interest. However, if we found that voter mobilization by candidates was occurring in such a way that specifically cut across education and social class lines, this assumption would not hold.⁶⁹

69 Islamism mobilization may be the first example to come to mind. However, many of the leading explanations for Islamist electoral support emphasize the importance of class, social mobility, and social service provision. Several studies examine the socio-economic backgrounds of Islamists supporters or the socio-economic conditions and social service needs in their local strongholds (see: Wickham, 2002; Masoud, 2014).