

Religious rebound, political backlash, and the youngest cohort: understanding religious change in Turkey

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We distinguish two streams of theory that dominate explanations of religious change: cohortbased cumulative decline theory, which emphasizes small and ongoing declines in individual religiosity accruing across generations; and political backlash theory, which emphasizes periodand identity-based changes due to the politicized meaning of religion. Notably, Muslim countries have largely been excluded from a recent wave of quantitative research on individual-level religious change, implicitly continuing an assumption that Islamic societies require different theoretical concepts. We deploy both theories to examine religious identity and behavior over multiple decades in Turkey, a Muslim-majority country with recent social conflict over religion.

Utilizing age-period-cohort interaction models, our results suggest minimal evidence for a cohort-based process in Turkey, in contrast to that observed in Western countries. Rather, a political transformation—the politicization of religion through the rise of Turkey's AKP (Justice and Development Party) and President Erdogan—is most salient to Turkish religious change. We introduce two concepts to backlash theory—identity updating and performance signaling—to show how different dimensions of individual religiosity respond to different politicized contexts. These findings extend our understanding of religious change beyond the Western context, with further implications for theorizing political backlash and cohort-based processes.

Key words: religion; politics; secularization; political backlash; Turkey.

Introduction

How does religiosity change? Two streams of theory increasingly dominate explanations of religious change. Cohort-based cumulative decline theory (Brauer 2018; Molteni and Biolcati 2023; Voas 2009; Voas and Chaves 2016) describes a monotonic logic to individual-level secularization of processes. multiple decades in Turkey, a Muslim-majority country with recent social conflict over religion.

Voas 2009; Voas and Chaves 2016) describes a monotonic logic to individual-level secularization 9 within Western countries, as small declines in religious belief and behavior build up across generations into a large secularizing result. This theoretical approach uses repeated, crosssectional survey waves to uncover a process that can be difficult to observe across a short time period. By contrast, political backlash theory (Braunstein 2022; Campbell et al. 2020; Çokgezen 2022; Hout and Fischer 2002, 2014; Margolis 2018; Tezcur et al. 2006) focuses on the link between

politics and religion, examining how this link could accelerate, decelerate, or reverse individuallevel secularization. This approach tends to focus on a short time period, with changes in religious belief and behavior due to the period effect of politicization on religion at a specific point in time. While these approaches are not inherently opposed, they have been mostly used in relative isolation from each other, focusing on different temporal segments within the same country context (though see Hout and Fischer 2002 for a notable exception). Further, the cohort-based approach has been overwhelmingly deployed and developed using Western European and U.S. cases. We engage both theoretical streams simultaneously through multiple waves of the World Values Survey to assess whether religious identity and behavior are changing in a non-Western case—Turkey.

In recent years, religious leaders in Turkey have argued that a crisis of religious faith is occurring among the "younger generation," with young people leaving Islam to embrace atheism (Günaydın 2017). These claims have triggered heated debates in the Turkish public sphere (Bilici 2018), with state-supported religious authorities denying them and attributing any religious change to foreign government interventions and social media (Sabah 2018). Some sociological research on religious change finds evidence of recent religious decline in Turkey, prompted by the politicization of clergy (Çokgezen 2022) or modernization (Ertit 2018). We revisit the Turkish case to test and further conceptualize the cumulative cohort decline and political backlash approaches.

We make four contributions that advance the analysis of religious change more broadly. First, we examine a Muslim case with two approaches, one of which has been overwhelmingly framed around Western, non-Muslim cases. Second, we show that, in a country in which we might expect cumulative decline theory to apply, cohort differences are minimally evident. We conclude that individual-level religiosity in Turkey has not yet experienced a cumulative cohort-based decline and discuss possible reasons why. Third, we show how a political transformation—the institutional de-differentiation of Turkish society, the politicization of religion through the rise of Turkey's Justice and Development Party (hereafter AKP), and related intensive polarization appears to have produced multiple backlash dynamics, including a general religious rebound during one time period. Finally, we introduce two new concepts—identity updating and performance signaling—that account for how different aspects of religiosity, which have been treated as similar in the backlash literature, may respond differently to political conditions.

Theoretical framework

Conceptualizing secularization

Over the past two decades, social scientists have increasingly used two approaches to analyze religious change in general, and secularization in particular, in Western countries. These two approaches generally address the dimension of secularization characterized by changes in individual-level religiosity (belief, identity, practice) as opposed to institutional differentiation (Casanova 1994, 2019) or religious privatization (Chaves 1994).

Cohort-based approaches

Cohort-based approaches use repeated, cross-sectional surveys in order to identify how respondents born in year ranges (cohorts) are distinct from one another. Typically, these approaches use deciles to group respondents by birth. Once differences in individual-level religiosity are identified across multiple cohorts, analysts typically imply that changes in religious socialization have occurred. As Voas and Chaves (2016: 1548) write, "Children are raised by parents who are less religious than their parents were, and the culture is gradually reshaped with the passing of each successive generation." Between-cohort changes in religious socialization tend to be small such that this mechanism of change can only be detected with surveys that include multiple generations over a long time period. Over time, small changes from one cohort to the next have

a cumulative "snowball" effect, particularly as younger cohorts age and comprise an increasingly larger share of a population.

Until recently, the literature on cohort-based secularization in the U.S. was characterized by contentious debates. While some studies claimed that different birth cohorts had stable attendance rates (e.g., Firebaugh and Harley 1991), others argued that there had been a significant generational decline in church attendance (e.g., Schwadel 2011). The difference between these findings appears due to differences in the time period analyzed, such that analyses that track fewer cohorts over a shorter time period show less evidence of cohort change (Voas and Chaves 2016). Most recently, Voas and Chaves (2016) have shown that rates of church attendance and religious belief in the U.S. and other English-speaking countries have decreased, cohort by cohort, for a long time. Importantly, this process is not country-dependent, as this is a "general pattern of religious decline" (2016:1549) found in Western countries characterized by Christian heritage and advanced modernization (Molteni and Biolcati 2023). Using the concept of "fuzzy fidelity," Voas (2009) argues that variations among European countries in timing or intensity of religious decline are largely caused by the proportion of individuals within a country who are moderately religious, having fuzzy connections to traditional religious beliefs and behaviors. Over time, the moderately religious proportion grows then shrinks, giving way to weak or non-existent religiosity in ensuing generations. Brauer (2018) argues similarly regarding the U.S. case, employing Voas' fuzzy fidelity

Beyond Western Europe, the cohort-based story becomes more complex. Voas and Doebler (2011) report that in most Eastern European countries successive cohorts do show less religiosity than the preceding ones. However, some cohorts among those countries display increasing religiosity. For example, they show that Romanian and Bulgarian participants born in the 1970s have higher levels of religious identification and service attendance than earlier birth cohorts. Hardy et al. (2020) show decreasing levels of affiliation across cohorts in the areas bounded by the former West and East Germany. But they also note that cohort-based change is present alongside period effects related to post-war political and economic conditions, as well as changes in the institutional relationship between religion and state. Period effects help account for present-day differences in disaffiliation rates of change and absolute levels of disaffiliation. By extension, we should expect that in nations that experience society-wide political or economic crises, including re-negotiations of the religion-state differentiation (Kazemipur 2022; Tezcur et al. 2006; Zubrzycki 2006), period effects will help explain variation across cohort trajectories in the individual level of secularization. How and why this happens has been recently addressed by political backlash theory, to which we now turn.

Political backlash approaches

Political backlash approaches are characterized not by confrontation with secularization theory but by a focus on religious changes—whether increases or decreases—in country-specific religious fields. While some of these approaches use repeated, cross-sectional surveys to examine specific historical periods (Çokgezen 2022; Kazemipur 2022), not all do, with some using historical case studies (Zubrzycki 2006). No matter the method, political backlash approaches share three features. First, they identify and examine period effects—transient society-wide conditions or events that are experienced by all residents of a country. Second, they examine how the meaning of "religion" in a given society impacts individual-level religiosity, theorizing how the valuation and signal content of religious practices and beliefs changes due to transformations in the political field. Third, they examine how the impact of period effects is moderated by individual characteristics, causing divergent impacts on individual religiosity. Political backlash approaches are not primarily about secularization, so they do not constitute an alternative explanation to secularization theories. Instead, political backlash approaches can help illuminate why religious decline or reversal occurs, either apart from or in interaction with cohort-based processes.

In their pioneering article, Hout and Fischer (2002) find that the growing trend of disaffiliation from religion among liberals and moderates during the 1990s corresponded to the rise of the

Religious Right in the American political field. Although liberal and moderate individuals in the U.S. often continued to maintain their religious identities, they became more likely to show antipathy towards organized religion by the end of the 1990s. The authors concluded that the increasing politicization of religion by political conservatives led political liberals with moderate levels of religiosity to move away from traditional religious organizations. This pattern in which religion was symbolically recoded was succinctly captured by Baker and Smith (2015): "If that's what it means to be religious, then I'm not religious." The literature on religious change due to politicization in the United States largely corroborates the argument of Hout and Fischer (e.g., Campbell et al. 2020; Hout and Fischer 2014; Margolis 2018).

Recently, Braunstein (2022) argues that although the literature tends to characterize political backlash as the rejection of religion in general, what Hout and Fischer (2002) describe is a more specific rejection of organized religion in conjunction with the choice to adopt or maintain a "spiritual" identity. In other words, individuals were not renouncing religion; rather, they were adopting a new kind of religiosity that was untarnished by its affiliation with extreme conservatism, or even political activity at all. Braunstein (2022) theorizes multiple types of political backlash against the Religious Right using the "radical flank effect" (Haines 1984), which assumes that radical actors can positively or negatively influence moderates within a field as well as the meanings in the field itself. Accordingly, the focus on the rapid "rise of the nones" (i.e., "broad backlash") may miss a "narrow backlash," which Braunstein (2022: 303) describes as "a rise in moderate organized religious affiliation and spiritual identification, positive attention to the Religious Left, and depoliticization of liberal religion." Especially relevant for our purposes is Braunstein's focus on how political context can cause growth in religiosity, a dynamic mostly explored under the term "counter-backlash."

The recent period of U.S. history contains a clearly transformative political event that appears to have prompted religious change: Donald Trump's 2016 election. Stroope et al. (2021) observed an increase in evangelical identity among Trump supporters lacking traditional religious ties, suggesting that for some, religious identity has merged with political identity. Braunstein (2022) explains this as "joining in," where previously non-religious individuals align themselves with evangelical identities through political affinity. Actors who were previously non-religious come to perceive themselves as culturally or politically aligned with religious actors—for example, through their shared support of Donald Trump-and "join in" by using the evangelical religious identity. Braunstein also identifies "digging in," where religious individuals, feeling threatened, intensify and even radicalize their beliefs. This has been evident among certain U.S. evangelicals and Catholics, who adopted more nationalistic and exclusionary views following Trump's election. These dynamics illustrate how political events can reshape religious landscapes, an idea central to the theory of political backlash, predominantly applied to the U.S. context.

Expanding political backlash theory by accounting for dimensions of religiosity and political regime Identity updating

The political backlash literature has mostly not theorized how political dynamics may have divergent impacts on different dimensions of religiosity (though see Tezcur et al. 2006). For example, those actors mentioned in the previous paragraph that were not previously religious "joined in" to religious identity by claiming the label of evangelical after Trump's election but, notably, did not "join in" with religious attendance (Braunstein 2022). Why? Change in religious behavior among non-religious actors in the U.S. after Trump's election would have been personally costly, involving time reallocation, effort to find organized religious services to participate in, and possible reorganization of personal social networks. By contrast, adding religious identity was relatively low cost but still provided a clear benefit: alignment with an evangelical identity that was becoming increasingly visible, even celebrated by new political actors. Claiming a label was easier than changing practice but still beneficial for personal identity. We suggest that identity

updating is one mode of joining in which is especially likely to occur in periods of increasing religious presence in the political sphere.

Performance Signaling

In a different political context, however, these religious dynamics may flip, with individuals joining into religious behavior but not religious identity. For example, in a political context characterized by transition to state religious authoritarianism, the signaling potential of religious behavior is high and the associated personal social and political gains may offset the costs. In $\vec{\delta}$ this case, joining in means displaying religion in public. Koesel (2014) has shown how public religious behavior in religious authoritarian contexts is coded as support for the political regime, potentially opening access to political and economic opportunity for those willing to try. A familiar example is post-revolutionary Iran, in which religious participation—public and visible yielded social and economic privileges for those who joined in (Kazemipur 2022). As Tezcur et al. (2006: 227) write about Iran, "attendance in Friday congregations [was] transformed into an act of political ideology" and a display of regime loyalty. In Turkey, there is evidence that growing religious authoritarianism led women to increase veiling—a public religious behavior—but not their personal religious practice (Aksoy and Gambetta 2021). We suggest that performance signaling is one mode of joining in which is especially likely to occur in periods of increasing religious authoritarianism, when public religious behavior can generate social or political benefits.

The Muslim exceptionalism and secularization debates in Turkey

How might the cumulative decline and political backlash theories apply to Turkey? Scholars of religious change often argue that the Muslim world remains a major challenge to the classical secularization arguments (Joppke 2015). One of the common explanations behind this phenomenon is the supposed impossibility of separating (dis-establishing) religion from state in (2006: 227) write about Iran, "attendance in Friday congregations [was] transformed into an act

Muslim societies. Indeed, some scholars assert that the distinction between religion and state is not compatible with Islam (Lewis 1991). This supposed lack of religious-political differentiation is crucial, as Casanova (1994, 2019) suggests that institutional differentiation is a historical necessary step towards individual-level secularization.

The assumption of Muslim exceptionalism has been challenged in a number of ways, most Muslim societies. Indeed, some scholars assert that the distinction between religion and state is

recently by Kazemipur (2022), who argues that Iranian society has gone through a secularization period similar to Western countries (see also Tezcur et al. 2006). After presenting evidence of Iranian religious decline, Kazemipur (2022) argues that Iranian secularization has taken place $\overline{\mathfrak{D}}$ not due to the separation of religion and state but the merger of the two. The institutional merger $\vec{\sigma}$ of mosque and state during the Humeini regime in the 1980s resulted in an unintended national situation—where religion is subservient to the state—diminishing the influence of religion on everyday lives over time. While this case is useful for understanding that individual-level secularization can occur in a non-Western, Muslim country that lacks the pre-condition of institutional differentiation, the conclusion is not too surprising given long-running assumptions within the differentiation, the conclusion is not too surprising given long-running assumptions within the sociology of religion about the effects of a state religious monopoly on individual religiosity (Stark and Finke 2000). What of a Muslim-majority country with institutional differentiation?

Turkey provides a fruitful non-Western, Muslim-majority case to test theories because, similar to France, it had a decades-long governmental policy of official secularism and strict religionstate separation (Casanova 2019; Kuru 2007). And, similar to other European countries, Turkey has multiple hallmarks of modernity, a "mix of industrialization, democratization, urbanization, 5 rationalization, cultural diversity, expanded education, and increased prosperity..." (Voas and Section 2) Chaves 2016: 1522). In this way, we might expect a similar situation in Turkey as exists in Europe relatively low levels of religious identification and practice, with evidence of cohort-based decline. Indeed, some analysts (Ertit 2018) overtly argue that Turkey is going through a secularization process due to modernization.

Yet, the dominant religious tradition in Turkey—Islam—has a different (non-congregational) structure than France and other Western countries, raising the possibility that the dynamics of

religious change differ. Further, over the last twenty years, Turkey's government has reversed the long-running separationism policy, with a growing religious nationalism articulated by the President Erdogan and the AKP (Çokgezen 2022). Çokgezen (2022) argues that this politicization led to religious decline, though that study did not theorize different aspects of religiosity or account for political identity of respondents. Others argue that Turkey has experienced a religious revitalization because of the explicit attempts of the AKP and Erdogan to inject Islamic values and Ottoman heritage into the society (e.g., Çarkoğlu and Toprak 2006). These interpretations reflect the possibility of period-based political processes, which are a key aspect of political backlash theory.

Theoretical explanations

Differing explanations about what is happening in Turkey are, in part, due to a focus on different time periods and processes. We aim to overcome this by incorporating both cumulative decline and political backlash theory, as well as including the new concepts of identity updating and performance signaling developed above. Our hypotheses are as follows:

H1: (Cumulative Cohort Decline Theory): In Turkey, a modernized country that until recently had a long-running secularist state, cohort-based differences in individual religiosity will exist and cumulate with cohort replacement.

H2: (Political Backlash Theory): Political shifts of the Turkish state after the rise of the AKP and President Erdogan will have differential effects on religious identity and behavior.

H2a: The emergence of a moderate religious political party promoting public religious identity in 2002 will lead to joining into religious identity (identity updating).

H2b: The emergence of religious authoritarianism and state control by a religious party after 2010 will lead to joining into religious attendance (performance signaling)

H3: (Political Backlash Theory): Changes in religiosity after the rise of Erdogan will be associated with political identity, such that:

H3a: Non-members of the AKP will show lower levels of religiosity over time (backlash) H3b: Members of the AKP will show higher levels of religiosity over time (counter-backlash)

Data and methods

Our analysis uses data from the World Values Survey (WVS), a nationally representative, repeated, cross-sectional survey done in more than 100 countries (Inglehart et al. 2022). The WVS contains seven waves, six of which include Turkey. The dataset covers a nearly thirty-year time frame (1990-2018), allowing observation of cohorts across time. The WVS in Turkey was carried out by the Turkish Statistics Institute (TSI) which conducted face-to-face interviews with respondents in Turkey.1

Dependent variables

To assess individual religiosity we use two variables. The first, Religious Person, measures religious identity in a similar way as other research using self-reported religiosity (Brauer 2018; Voas 2009). For participants in Turkey, WVS respondents were asked to answer the following question: "Independently of whether you go to a mosque, synagogue, or church, would you identify yourself as a religious person? Which one of the following is true for you?" with answers 1 for "A religious person", 2 for "Not a religious person", and 3 for "An atheist". We transformed this into a binary variable with "1" for those who identify as religious and "0" for otherwise. 2 The second, Religious Service Attendance, measures public religious practice in organized religion. Respondents were asked to answer the following question, "Apart from weddings, funerals, and christenings, about how often do you attend religious services these days?" with options ranging from 1 for "More than once a week" and 2 for "Once a week" to 7 for "Less often" and 8 for "Never, practically never." We recoded this to indicate respondents who attend monthly or more often (1) in contrast to less than monthly (0). In a predominantly Muslim context like Turkey, this monthly cutoff indicates a moderate level of mosque attendance, which is a reliable indicator of public religious engagement (Brenner 2011).

Independent and control variables

Age is estimated by subtracting the year of birth for each participant from the respective survey year. Since the survey waves are at different intervals, and never more often than every 5 years, we use survey years (1990, 1996, 2001, 2007, 2011, and 2018) to indicate periods. For cohort, multiple birth years are categorized into 10-year age groups aligned with decades (1920-1929, 1930-1939, etc.). Political Affiliation indicates answers to, "Which party would you vote for if there were a national election tomorrow?" Answer categories cover all parties in Turkey at the time of each wave. Since Erdogan's AKP did not exist prior to 2002, we only include the three most recent WVS waves for our political backlash analysis. AKP supporters are coded "1", whereas non-AKP supporters are recoded as "0".

Other control measures were added into the models as well. Based on the individual-level data from the WVS, Household income is a decile measure standardized for Turkey in which "First Step" refers to those in the lowest income group, and "Tenth Step" represents those in the highest income group. Educational Level is ordinal with three levels: "Lower" (Elementary and Middle School), "Middle" (High School), and "Higher" (Above High School). Female represents sex, with "1" and "0" referring to females and males, respectively. Unemployed is recoded from a question regarding employment status, with "1" indicating those that are unemployed and "0" those that are employed. Married is a dummy variable, with "1" corresponding to those that are married.

Analytic strategy

We first employ a graphical analysis of the levels of religious identity and attendance over the time period covered by the WVS. Each figure's vertical axis shows the percentage of those with the characteristic (identifying as religious; attending religious services at least once a month). The horizontal axis refers to the survey years. Lines display the level of religiosity for birth cohorts over time.3 Then, we test for the relative importance of period, cohort, and age effects on religious identification and service attendance levels by applying age-period-cohort interaction (APC-I) models for all survey years (Luo and Hodges 2022). Compared to earlier APC models, which were often identified through untenable model constraints in order to include separate variables for age, period, and cohort, APC-I models conceptualize cohort as an interaction of ageby-period. In the context of APC research, this refers to the idea that if observed temporal trends are due to cohort effects, then significant interactions between age and period will be observed. Conversely, if cohort membership does not influence the outcome—meaning that the impact of historical or social changes (period effects) is consistent across different age groups—then an interaction between age and period will be absent. Thus, cohorts are defined as the interaction between age and period effects (Luo and Hodges 2022), aligning more closely with the theoretical understanding of a cohort (Ryder 1965) rather than an additive model of the age-period-cohort relationship.

An additional advantage is that APC-I models allow for the examination of changes in cohort effects. This feature is particularly crucial for achieving the objectives of our study because, as highlighted in the political backlash literature, period effects can interact variably with different cohort groups. Such interactions may manifest differently across cohorts, suggesting that the impact of these period effects is not uniformly distributed. In this way, the APC-I model allows us ξ stable over time (Luo and Hodges 2022; Xu and Luo 2022). We then focus on period effects. We present a graphical analysis of Erdogan's time period with the control of the period with the control of the period with the peri his 2002 election (2007, 2011, and 2018). We create another APC-I model to analyze how period and partisanship affect individual-level religiosity.

Table 1. Descriptive statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max
Dependent variables					
Religious person	10,818	.775	.418	0	1
Religious service attendance	10,833	.388	.487	0	1
Independent variables					
Period	11,625	2004.795	8.8	1990	2018
Year of birth	11,625	1967.496	15.575	1920	1999
Age	11,625	37.299	13.576	17	95
Control variables					
Household income	11,221	4.241	2.129	1	10
Education level	11,284	1.693	.791	1	3
Female	11,625	.501	.5	0	1
Unemployed	11,489	.067	.251	0	1
Married	11,601	.682	.466	0	1

Results Cohort or period?

Figure 1 demonstrates that individual birth cohorts have tended to maintain or even increase their religious identity over time, until 2011. Minimal differences on the y-axis between cohorts indicate that subsequent generations in Turkey have similar levels of religious identification with the preceding ones. The youngest cohorts are slightly lower in religious identity relative to older cohorts at the time they enter, but their absolute level of religious identity when they enter is similar to the absolute level of religious identity of the previous cohort when it entered. While there may be some differences between cohorts in level of religious identity, there is no clear cumulating decline of religious identity across cohorts over time. The figure suggests a period effect around 2001, after which the level of religious identity increased for every cohort, and around 2011, after which level of religious identity declined for every cohort. The figure also suggests a possible lifecycle process among the middle cohorts, with these cohorts generally increasing in their religiosity over time.

The results displayed in figure 2 for religious attendance are mostly consistent with figure 1. Succeeding cohorts mostly have similar attendance levels to preceding cohorts, though with a few deviations. The oldest cohort has a markedly different level of religious attendance than all other cohorts, though this cohort exits the survey after 2001 due to death. The youngest cohort is lower in religious attendance relative to other cohorts at the time it entered. As with religious identity, there appears to be a notable period effect around the year 2011, after which every cohort increases in religious attendance. There may also be evidence of a period effect around the year 1996, after which every cohort decreased in religious attendance. The figure suggests some evidence for a lifecycle effect, though not a continuous, unidirectional impact of age.

In contrast to literature on Western, Christian countries that increasingly explains secularization primarily through cumulating cohort effects (Brauer 2018; Molteni and Biolcati 2023; Voas 2009; Voas and Chaves 2016), these descriptive findings suggest that trends in Turkey are different. Religious change in Turkey is not unidirectional and may be especially driven by period effects and, to a lesser extent, by lifecycle. In contrast to H1, evidence for a persistent, cumulating cohort process is minimal, though we note the possibility of such an effect beginning with religious identification among the youngest cohort.

Most striking in the Turkish case are the changes in individual religiosity associated with period effects, with these effects impacting types of individual religiosity differently. After 2001, religious identity rises among all cohorts. By comparing the two figures, one sees a surprising

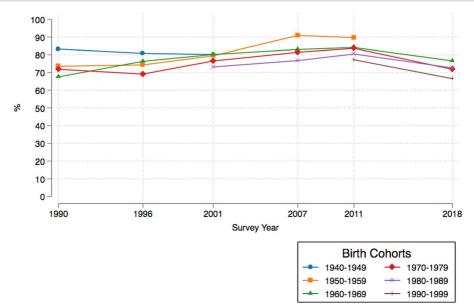


Figure 1. Religious identification by birth cohorts.

Table 2. Descriptive statistics for cases in AKP period (WVS waves 2007, 2011, 2018).

Variable	Obs	Mean	Std. Dev.	Min	Max
Dependent variables					
Religious person	4806	.776	.417	0	1
Religious service attendance	4819	.377	.485	0	1
Independent variables					
Political affiliation	5061	.411	.492	0	1
Period	5061	2013.314	4.633	2007	2018
Year of birth	5061	1976.683	11.86893	1950	1999
Age	5061	36.631	11.823	17	68
Control variables					
Household income	4919	5.004	2.142	1	10
Educational attainment	5052	1.695	.747	1	3
Female	5061	.506	.5	0	1
Unemployed	5048	.063	.243	0	1
Married	5058	.637	.481	0	1

pattern emerge. After 2011, there is a clear "crocodile jaw," with religious identity—a measure of private religiosity—declining among all cohorts and religious attendance—a measure of public religious behavior—rising among all cohorts. The impact of period on the most recent birth cohort (1990–1999) is particularly interesting. This cohort's attendance rate rose from 26% to 39% (a 50% increase), while this cohort's religious identification decreased from 77% to 66% in the same time period.

Table 3 presents results from APC-I models of religious identification and service attendance for all survey years (see Appendix T.3. for included control variables). The results again confirm multiple period effects in different directions. Individuals identify as less religious in 1990, 1996, and 2018, but *more* religious in 2007 and 2011. There are relatively fewer cohort effects observed

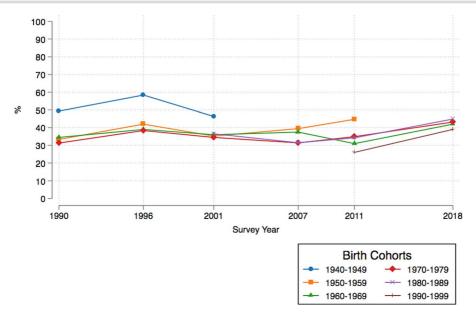


Figure 2. Religious service attendance by birth cohorts.

and those effects go in opposite directions. Turkish people born in 1940–1949 and 1970–1979 are less likely to identify as religious, while those born in 1960–1969 are moreso. Overall, in terms of religious identification, period effects are more salient than cohort effects, as five of six periods are statistically significant while only three of eight birth cohorts are. We also find some evidence for an age effect, as older adults report greater religious identification.

Results in table 3 regarding religious service attendance clarify patterns shown in figure 2. The period effects are not always in the same direction. Turkish adults report *less* religious attendance in 2001 and 2007, but *more* religious attendance in 1996 and 2018 (See Appendix T.8. for results with weekly religious attendance measure). There is evidence for two cohort effects, though these are in opposite directions. Again, period effects are more important in our model, with four out of six periods showing statistical significance, compared to cohort effects, which are significant in only two out of eight cohorts. The effect of age is salient across all age categories, with coefficient signs suggesting lessening religious attendance until middle age, after which individuals report more religious attendance.

Comparing the impact of period and cohort on the two outcomes highlights important patterns. First, cohort effects are minimal and, as seen with opposing coefficient directions, do not easily comport with cumulative cohort decline theory. Thus, we reject Hypothesis 1. Second, three periods (1996, 2007, and 2018) impacted both outcomes. Third, at each of these periods, the direction of change for each outcome was opposite. In 1996, religious identification declined and attendance rose; in 2007, religious identification rose and attendance declined; in 2018, religious attendance rose and religious identification declined.

Period effects and "joining in" processes

We turn to explaining these period effects. With reference to the political backlash literature and our reinterpretation of backlash theory's "joining in," it is plausible to expect that some of these period effects are related to growing levels of political polarization in the Turkish public sphere.

Figure 3 shows political polarization trends in Europe, Turkey, and the U.S from 1990 to 2021, based on data obtained from Varieties of Democracy (V-Dem) dataset (Coppedge et al. 2021; Pemstein et al. 2021). V-Dem determines the degree to which political disparities influence social

Table 3. Age-period-cohort interaction (APC-I) models of religious identification and service attendance for all survey years.

	Religious pe	Religious person		Religious service attendance		
	${\beta}$	SE	β	SE		
Age						
17–34	-0.052	0.041	-0.109	0.039**		
35-49	-0.082	0.043	-0.151	0.040***		
50+	0.134	0.051**	0.260	0.045***		
Period						
1990	-0.290	0.079***	-0.081	0.076		
1996	-0.174	0.068*	0.321	0.067***		
2001	0.020	0.056	-0.163	0.053**		
2007	0.259	0.082**	-0.215	0.068**		
2011	0.531	0.075***	-0.052	0.063		
2018	-0.346	0.054***	0.188	0.055***		
Cohort						
1920-1929	-0.057	0.123	0.026	0.117		
1930-1939	0.128	0.086	0.138	0.083		
1940-1949	-0.137	0.056*	-0.047	0.056		
1950-1959	0.035	0.064	-0.074	0.054		
1960-1969	0.136	0.065*	0.033	0.053		
1970-1979	-0.131	0.057*	-0.159	0.052**		
1980-1989	0.027	0.058	0.205	0.055***		
1990-1999	0.037	0.066	0.027	0.069		
P < .01 aP < .05 *P	P < .001					
is perceived highly	polarized when a	alogue. According to dherents of different	political factions sh	now a hesitance		
community group	s, recreational eve	cross diverse social s nts, and professiona	l environments. Th	e estimate rang		
		ters of opposing car				
Compared with	Europe and the U	ostile interactions be nited States, in figur	e 3, Turkey has pers	istently witness		
the highest levels	of political polariz	zation. A notable lea	p in Turkish polari:	zation occurred		
		As part of its rise, the				

^{**}P < .01 P < .05 ***P < .001

the highest levels of political polarization. A notable leap in Turkish polarization occurred in 2002—the year of Erdogan's election. As part of its rise, the AKP intertwined Islamic identity with political campaigns, promising to assign Islamic actors that had been previously sidelined to key positions in politics (Kandiyoti 2012). However, it did this in a way that did not directly target the dismantling of secular state institutions but instead projected a moderate, pro-democracy religious message to a wide constituency (Tuğal 2015). Tuğal notes that the AKP emphasized "their allegiance to the free market ... parliamentary democracy, and the EU process" (97). As a result, adequite dismay among elites at the election of the AKP Turkish adults could "join in" through despite dismay among elites at the election of the AKP, Turkish adults could "join in" through identity updating, claiming religious identification at higher levels by 2007 (and 2011) than in 2001 (fig. 1). In table 3, respectively, individuals are 1.30 (P < .01) and 1.70 (P < .001) times more likely to identify themselves as religious in these periods, supporting Hypothesis H2a.

The figure shows further rises in polarization in Turkey around 2007 and 2011. During this period, the AKP transitioned towards a tripartite focus on the Islamization of civil society and government, the centralization of political and state power under Erdogan and increased focus on ethnic nationalism. For example, this shift is evident in growing religious politicization strategies as part of the government's stance toward the Kurdish conflict. In early years, the AKP attempted to resolve the Kurdish conflict and bridge the ethnic divides between Sunni Muslim Turks and Kurds by promoting Islam as a supranational identity. However, when Erdogan and the

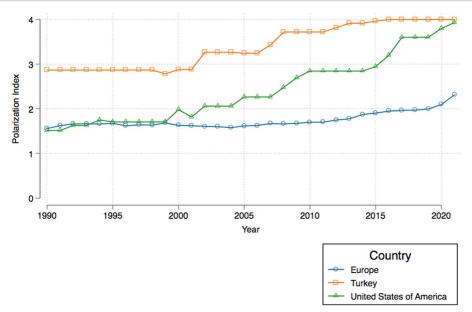


Figure 3. V-Dem political polarization index for Europe, Turkey, and the U.S. over time.

AKP perceived that this approach of using Islam and the Qur'an as a unifying identity with devout Kurds did not work, they shifted towards ethno-nationalism to win the electoral support of Turkish nationalists (Türkmen 2021). After 2010 in particular, Erdogan and his government increasingly linked ethno-nationalist identity with religious discourse through a set of policies that elevated Islamic identity. These policies included the extreme expansion of the Diyanet's (the Turkish Directorate of Religious Affairs) budget and a high-profile governmental project to raise "a pious generation" in cooperation with state-friendly religious organizations (Çokgezen 2022). The AKP's continuous control of governmental institutions bolstered these efforts to reshape society around religious ethno-nationalism (Çokgezen 2022; Türkmen 2021). The AKP's use of more ultra-nationalistic rhetoric was embraced by many religious leaders who had increasing political significance. Türkmen (2021) demonstrates how Turkish religious elites who initially appeared to support Islamic unity ultimately promoted a Muslim identity heavily laced with Turkish nationalism.

In this era of authoritarian religious nationalism, public religious practice was cultivated by the state (Türkmen 2021). Moderate national elites showed a backlash to these developments, including the failed coup attempt in 2016 (Filkins 2016). Nonetheless, the AKP increased its share among the public (See Appendix T.5) and the frequency of religious attendance increased in Turkish society (fig. 2).6 Turkish adults could "join in" through the performance signaling of religious attendance, potentially receiving the social and political benefits of alignment with the increasingly religious and radicalized regime. In table 3, respectively, individuals are 1.21 (P < .001) times more likely to attend religious services in 2018, supporting Hypothesis H2b.

Similar to the United States, periods of polarization and transformation in the Turkish political field appear to influence changes in the religious field. The first phase of Erdogan's rule was associated with an increase in religious identification (identity updating). The second phase of Erdogan's rule was associated with an increase in religious attendance (performance signaling). Though we did not hypothesize it, the second phase was also associated with a decrease in religious identification (the bottom of the crocodile jaw), a result we revisit in the discussion.

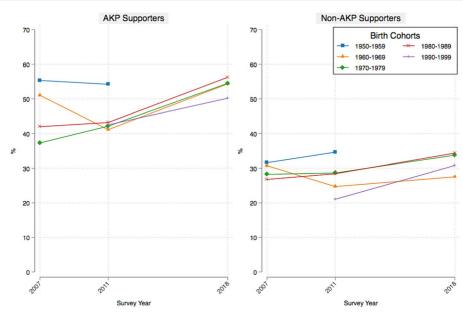


Figure 4. Religious service attendance among AKP and non-AKP supporters by birth cohorts.

Political identity and religiosity

Political identity is a key mechanism in backlash theory, so it is plausible that these religious dynamics are associated with the political affiliation of Turkish adults. As explained above, since 2002 the Turkish political field shares a key mechanism with the U.S. case that led to religious backlash in the 1990s: a political party transformed the social meaning of religion by articulating a conservative religious agenda linked to political identity, using political campaigns and state power to protect religious privilege. In the U.S. case, political party affiliation became associated with differences in individual religiosity. Individuals with a liberal (Democratic) partisan affiliation showed the largest percentage decline in religious identification and attendance.

We examine whether political affiliation works similarly in the Turkish case. Since the AKP did not exist until after the 2001 survey wave, we are only able to use the three most recent WVS waves (see Table 2 for descriptive statistics for the AKP period). Figure 4 displays the percentage changes in religious service attendance by cohort among AKP and non-AKP supporters. The left side of figure 4 shows attendance levels among individuals supporting the AKP. The largest increases correspond to the post-2010 time period, when Erdogan and the AKP adopted a more ethnonationalist Islamic public discourse. Notably, this trend of increasing monthly service attendance after 2011 occurred at a similar rate for each birth cohort, with an approximately 25% increase over previous levels. For non-AKP supporters, the right side of figure 4 shows all birth cohorts also notably increasing in levels of attendance after 2011.

Figure 5 examines religious identification and suggests that the difference between AKP and non-AKP supporters may be especially strong with this measure of religiosity. In the left side of figure 5, most birth cohorts among AKP supporters experienced small declines in their religious identification over time. This small change is at least partially explained by compositional changes among AKP supporters (As shown in Appendix T.5, the AKP share of the Turkish population grew from 32% (395/1221) to 46% (1094/2371) between 2007 and 2018, which included a rise in non-religious members from 6% to 14%).8 In the right side of figure 5, non-AKP supporters were decreasingly likely to have a religious identification after 2010. Contrary to small (positive) changes in attendance levels among non-AKP supporters in figures 4 and 5 indicates that non-AKP supporters markedly distanced themselves from religious identification. Notably, this trend

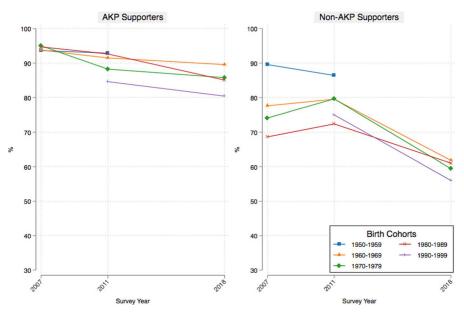


Figure 5. Religious identification among AKP and non-AKP supporters by birth cohorts.

Table 4. Age-period-cohort interaction (APC-I) models of religious identification and service attendance during the period of the justice and development party (AKP) government.

	Religious person		Religious service attendance		
	$\overline{\beta}$	SE	β	SE	
Age					
17–34	-0.110	0.069	-0.067	0.060	
35-49	-0.127	0.069	-0.036	0.058	
50+	0.237	0.098*	0.103	0.076	
Period					
2007	0.261	0.093**	-0.051	0.075	
2011	0.337	0.079***	-0.111	0.063	
2018	-0.598	0.064***	0.163	0.055**	
Cohort					
1950-1959	0.125	0.160	0.057	0.119	
1960-1969	0.024	0.109	0.054	0.083	
1970-1979	-0.129	0.066	-0.130	0.056*	
1980-1989	0.063	0.063	0.114	0.056*	
1990-1999	0.086	0.074	-0.004	0.067	
Political	1.269	0.086***	1.051	0.075***	
Affiliation					
(base: non-AKP)					

 $^{**}P < .01 \, ^aP < .05 \, ***P < .001$

of decreasing religiosity appears most pronounced in the youngest birth cohort of non-AKP supporters who experienced a decline from 75% in 2011 to 56% in 2018.

Based on this evidence, our results support Hypothesis 3b regarding attendance because levels among AKP supporters increased over time. Regarding religious identification, we find no support for Hypothesis 3b because levels among AKP supporters did not increase over time (and actually decreased). Our results support Hypothesis 3a regarding identification because non-AKP supporters decreased in identification over time. Regarding religious attendance, we find no support for Hypothesis 3a because levels among non-AKP supporters did not decrease over time

(and actually increased).

Table 4 shows results from APC-I models of religious identification and service attendance for survey years 2007, 2011, and 2018. Overall, the results are consistent with table 3 in the relative importance of period effects for shaping the trends for religious identification and service attendance levels in Turkey.9 There are almost no age or cohort effects on religious identification and attendance levels. The two cohort effects for religious attendance have opposite signs. Period effects for religious identification remain salient across all survey years. Individuals are more likely to report religious identification in 2007 and 2011, whereas people tend to report less religious identification in 2018. For attendance levels, only 2018 is significant. In that year, people were more likely to report attending religious services. Political affiliation is significant for both outcomes, with AKP members being 2.88 times more likely to report religious attendance and 3.55 times more likely to report religious identification, even though levels of identification decreased and levels of attendance increased among both groups, particularly after 2011.

and levels of attendance increased among both groups, particularly after 2011.

Figure 6 presents bar graphs to visualize the interaction of period (year) with AKP party affiliation. (See Appendix T.6-T.7 for regression results). These figures reinforce the message from figures 4-5 that the effects of political affiliation are complex in the Turkish case. First, backlash related to non-AKP political affiliation was not immediate. For both outcomes, the bars for the non-AKP in 2011 are nearly identical to 2007. Second, before a backlash in religious identity among those with an oppositional political affiliation, there may have been a rebound, as seen on the left side of figure 6 with a small rise in religious identification among non-AKP individuals. Only after 2011 did non-AKP members demonstrate a backlash related to AKP individuals.¹¹ Only after 2011 did non-AKP members demonstrate a backlash related to religious identity, co-terminus with the AKP's post-2010 phase of increasingly aggressive religious, ethno-nationalist rule. Third, there is no evidence for a counter-backlash among AKP supporters in religious identification, a result likely related to compositional changes. Fourth, backlash is missing for religious attendance. The right side of figure 6 reflects how the AKP appears to have had little impact on religious attendance until after 2011, no matter the political affiliation. It also shows a rise in religious attendance among the AKP—but not the theorized decline among the non-AKP—after 2011. Political affiliation with a religious, ethno-nationalist political party during a time of intensive religious politicization appears associated with a marked increase in religious attendance. The lack of a backlash among non-AKP individuals suggests that performancesignaling counteracted the expected effect of oppositional partisan affiliation on attendance.

Overall, political affiliation helps to explain the post-2011 jaw in aggregate religious change that we mentioned earlier. After 2011, religious identification decreased among all adults, but especially among non-AKP adults. After 2011, religious attendance increased among all adults, but especially among AKP supporters, who were an increasing share of the public.

Discussion and conclusion

We examined recent trends in both religious identity and behavior in Turkey. Our findings suggest that evidence for a cumulative, cohort-based process is minimal to date. Period effects tied to changes in the political field are especially important for understanding changes in religiosity in Turkey over the past thirty years. Here, we discuss the implication of our findings for different theoretical streams.

Cohort process: Missing but coming?

Our results suggest that a cumulative cohort replacement process has not taken place in the Turkish religious sphere, though some differences between cohorts exist. The current lack of a cumulative process in Turkey is somewhat surprising because state-enforced secularism shaped social life for over a century. It was reasonable to assume that the secular regime created

conditions favorable for a cumulative generational decline in religiosity. Instead, it is possible that the historical secular regime set a relatively stable pattern of individual religiosity apparent at the beginning of the survey period. This stable pattern is evident in the minimal difference in religious identification and behavior between most cohorts at the first survey year in figures 1 and 2.12,13

The Turkish case clarifies strength and a weakness of the cumulative cohort decline theory. One strength is that it was not conceptualized around assumptions of state-generated secularization that dominated earlier eras of secularization scholarship. Part of the appeal of the cohort replacement mechanism is its ability to account for secularizing trends in countries, especially the United States, which lack state-enforced secularism. A related weakness, however, is that the theory does not advance mechanisms for how cumulative cohort decline could begin in cases with a history of enforced secularism that lack a differentiated religious market structure (Stolz 2020).

We can only speculate, but it is possible that the most recent period effect in Turkey could set the conditions for a cumulative cohort decline process to begin. If the youngest cohort does not replicate the lifecycle dynamics that figures 1 and 2 suggest occurred in the past, then it may initiate the cohort decline process. There are three reasons to think this might occur. First, the Turkish state shows no sign of changing its politicized, authoritarian religious agenda, which since 2010 is associated with an overall decline in identification. Second, the declining religious identification has been especially large among those with oppositional political affiliation, suggesting growing de-legitimation of religion given its association with political polarization. Third, the decline in religious identification is especially strong among the youngest cohort of the non-AKP supporters. These patterns of politically influenced religious indifference which occur in young adulthood can have durable effects (Margolis 2018). It may take longer to observe changes in religious service attendance, particularly as contemporary attendance rates may be inflated by performance signaling. The difficulty of "seeing" a cohort change process comports with cohort theorists' argument that the process can hide in plain sight until enough longitudinal survey evidence is available. Time will tell.

Updating backlash theory

Our major contribution is clarifying religious backlash theory so that it can incorporate how different dimensions of religiosity respond to different political and religious dynamics. More specifically, we theorized two processes of joining in, one which is low cost and could be expected after emergence of a moderate religious party (identity updating) and one of which is higher cost and likely after a transition to religious authoritarianism (performance signaling). The former type is familiar from the U.S. case. The latter is evidence of public virtue signaling common to authoritarian contexts, whereby public religious behavior can display loyalty to the political regime, reflecting the regime's preference for dovetailing partisan and religious identity (Kazemipur 2022; Koesel 2014).

Our results showed that individual-level religiosity in Turkey have been shaped by period effects, especially since 2002. By connecting period effects with Turkish polarization and political regime dynamics, our analysis showed that the rise of a relatively moderate religious party to state power may have prompted identity updating, while the ensuing transformation of the same party into a conservative, authoritarian one may have prompted performance signaling. After the initial assent of the AKP and Erdogan to governing power, there was a general rebound in religious identification in Turkey. The AKP's assent, which was an overturning of the long-running Turkish secular regime and built on the Islamic civic mobilization that occurred in the 1990s (Tugal 2015: 92), may have signaled to Turkish society the public legitimacy of religious identity, particularly by articulating the place of that identity in institutional spaces (e.g., higher education, political parties, military) where it had heretofore been excluded. This is an example of period-effect religious revitalization that others have documented (Stolz 2020; Stolz et al. 2023). It is possible that this rebound is actually just the impact of identity updating among AKP supporters, but since we did not have AKP affiliation information at the beginning of the period we cannot determine

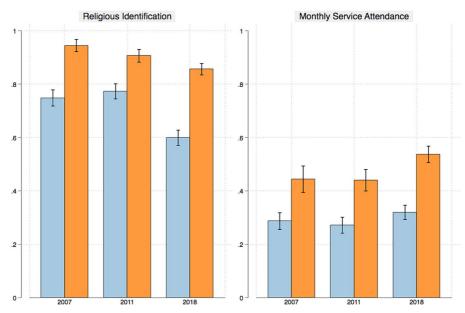


Figure 6. Estimated effect of the interaction between period and AKP affiliation on probability of religious identification and service attendance. Note: Darker (right) and lighter (left) bars display the values for AKP and non-AKP supporters, respectively.

this. The rise in religious identification even among non-AKP members between 2007 and 2011 (figs. 5-6) suggests a more widespread rebound.

Our results suggest that political affiliation is an important factor for understanding how political regime impacts religiosity. What is new from our research is how this might happen differently, compared to the U.S. case (Braunstein 2022; Hout and Fischer 2002, 2014; Margolis 2018). In Turkey, in the second phase of AKP rule after 2010, AKP political affiliation was especially connected to religious attendance increase while non-affiliation with the AKP was especially connected to religious identification decrease. By 2010, the AKP intensively politicized religion, increasing its use of divisive ethno-nationalist rhetoric and consolidating authoritarian state power. After 2011, religious identification among the Turkish population decreased, similar to the process of religious politicization in the U.S. in the 1990s, in which divisive, religiously-tinged events in the political sphere led to widespread religious disaffiliation. The conservative political agenda of the AKP and Erdogan appears to have led liberals and moderates (especially non-AKP members) to move farther away from religion. As Tuğal (2015:119) notes, "secular business and new middle-class allies but [also] anti-Islamist, conservative Islamic groups" were threatened by these changes. An alternative explanation, for which we do not have evidence to assess, is that the religious supply for attendance increased since 2011. Though unlikely, this is possible given the regime's investment in Islam (Cokgezen 2022). If true, however, this alternate explanation would challenge religious market theories that assume government dis-establishment as a precondition for religious revitalization.

ndition for religious revitalization. One aspect of backlash theory we could not adequately examine is the concept of "digging 8 in," which refers to the radicalization of religious persons in response to perceptions of social or political animus towards religion (Braunstein 2022). An analysis of digging in would ideally involve panel data, which would show pre-existing religiosity that increases as part of a counterbacklash to political dynamics that seem anti-religious. It is possible that some of the religious changes we uncovered in Turkey include evidence of digging in. For example, after 2010, people

with a religious identity who did not previously attend religious services might have "dug in" and begun to do so. However, other evidence suggests that those with the strongest personal religious identity in the general public may be the most likely to stop attending in authoritarian contexts (Tezcur et al. 2006). All of these processes—counter-backlash, digging in, performance signaling, and exiting—are possible in religiously conservative authoritarian regimes, a possibility that invites other researchers to consider how to further specify overlapping counter-backlash processes using other cases.

We note that our analysis also uncovered another period effect that we did not expect or theorize. During the rise of AKP and in its early rule, there was a general decrease in religious attendance as shown by a period effect in 2001 and in half of the cohorts between 2001 and 2007. We can only speculate, as we do not have AKP affiliation status for those years, but this temporary attendance decline may reflect the aftermath of the Turkish military's "postmodern coup" on February 28, 1997 (Çandar 1997), which aimed at excluding religion from public life. For instance, religious individuals faced job restrictions in elite institutions, and wearing headscarves was forbidden on college campuses until the late 2000s (Cizre-Sakallıoğlu and Çınar 2003). After such an aggressive stance around public behavior, AKP's relatively moderate outlook during its rise may have not reversed the political stigma around public religious behavior. 14 And, public religious behavior was as-yet untied to political goods from an authoritarian regime.

A final takeaway from our engagement with backlash theory through a new case is motivation for further engagement between research on state-sponsored religion and backlash processes. While the negative impacts of state-sponsored religion on individual-level religiosity have been theorized for some time (Casanova 2019; Stark and Finke 2000), our case shows that the effects can be heterogenous, dependent on the situation of religion at the beginning of state involvement as well as unfolding political dynamics (Koesel 2014). For a time, state involvement with religion in Turkey increased religiosity, but the extent and duration of this effect were limited, with a decline in religious identification occurring after the intensification of religious authoritarianism. This evidence also has an impact for sociological theorizing about the causes of religious decline, as explanations based on sequences of change in identity, practice, and belief need to disentangle and examine context-specific period effects.

While our analysis has significant strengths over most analyses of Turkish religious change, we note some weaknesses. First, we rely on a measure of religious behavior that, in most contexts, is problematic for its self-reported nature. Other research demonstrates that individuals tend to overreport their religious service attendance to offer a more consistent image with their selfidentity (Brenner 2011; Hadaway et al. 1993). Second, due to the non-existence of data, we are unable to analyze the profile of AKP supporters when AKP came to power. Third, the categories of AKP and non-AKP are unstable over time, as individuals enter and exit with election cycles. Thus, the effects of party across time are at least partially due to compositional change. Fourth, since our data are cross-sectional, we are unable to disaggregate whether religious identity led to changes in political identity, or vice versa. We have employed the logic used in current backlash research that political identity affects religious identity. This logic may not apply to the moment prior to our analyses, as it is likely that there was self-selection of highly religious individuals into the AKP as it rose to power.

Conclusion

Overall, our research suggests that Turkey has not, to date, experienced secularization through a cohort-based process observed in Western countries. Turkish society may, nevertheless, experience a secularization trend in the near future, given the declines of religious identification across younger adults since 2010s. Our research theorizes new conceptual tools of identity updating and performance signaling to understand these backlash dynamics, no matter the case context.

Endnotes

- 1. Throughout the waves, a multi-stage full probability sampling method was employed, reflecting the geographical segmentation of Turkey into NUTS regions. To ascertain the probability sampling units (PSUs), TSI utilized its "blocking system." This approach categorizes the entire population into specified groups based on household addresses, ensuring a comprehensive representation across different regions. For instance, in the 2011 WVS (6th wave), 300 household addresses were randomly selected from each of the 134 blocks (PSUs) across the whole population. Subsequently, twelve households from each of 300 addresses were chosen randomly for interviews. If an interview could not be conducted, a substitute address from the same block was randomly provided for the interview. Within an address, individuals were selected using a Kish grid for randomization. The survey achieved a response rate of 72 percent (Engin and Pals 2018; Esmer 2008; WVS 2017).
- 2. Other measures produce similar results for the patterns we show in analyses below. Appendix Figures 1-4 (F.1-F.4) and Table T.1. show the analyses using an alternative measure of religious identity: whether respondents believe that "God is very important." The results from this corroborate that period effects are more salient than cohort effects. Importantly for our analysis, the direction of period effects for 2007 and 2018 using this variable are similar. We were unable to use the WVS' "belief in God" measure because it was not asked in 2007, a year crucial to our analyses. Appendix Figure 5 (F.5) and Table T.2 indicate that the "belief in God" measure produces similar results as the religious identification and "God is very important" variables.
- 3. Birth cohorts are shown in the graphs only if the number of respondents in a given cohort exceeds 100 (Voas and Chaves 2016). Results are identical when using birth cohorts with fewer cases (N > 40) or different age ranges (5-year; 15-year).
- 4. Alternative specifications of the attendance variable in its original ordinal form or using the "implied probability approach" (Molteni and Biolcati 2023) do not produce substantive differences.
- 5. As shown in Appendix T.3., those with lower income and education levels and those who are married are more likely to identify themselves as religious and attend religious services. While females tend to identify more with religion, they are less likely to attend religious
- 6. Religious attendance increased in Turkey among both males and females during this period.
- 7. As a result of this data limitation, we cannot address how religious change in the first phase of the Erdogan presidency was associated with political affiliation.
- 8. These numbers are based on the analytic sample, which excludes earlier cohorts who exit the survey due to death or those with very low cohort sizes.
- 9. As shown in Appendix T.4., those AKP supporters with lower education levels and who are married are more likely to identify themselves as religious. AKP supporters, males, unemployed, and married individuals are more likely to attend religious services.
- 10. One limitation of APC-I models is that they do not directly allow for the interaction of period or AKP affiliation with birth cohort. That is because the model estimates birth cohorts as a structure of age-by-period interactions. Nevertheless, we wanted to examine an interaction 9 effect. Since we already show that cohort effects are minimal (Table 4), we excluded birth cohorts from logistic regression analyses for Figure 6 so that we could display interaction effects. Including age instead of cohort produce identical plots as well.
- 11. Our data are not longitudinal so we cannot be sure of the mechanism on the left side of Figure 6. It may reflect a sorting process in which more religious persons joined non-AKP parties while the strength of the AKP during its early phase attracted more non-religious persons.
- 12. We note that the oldest cohort in Figure 2 did have noticeably higher religious attendance and identity levels than other cohorts. With encouragement from a reviewer, we speculate

that this may be evidence of a World War II period effect on this generation during childhood, though we do not have data prior to 1990 to confirm this. A useful inquiry for religious change research would be to explore why this pattern did not transfer, as well as why ensuing cohorts shared similar patterns with one another.

- 13. Age influences both religious identification and attendance in a way that suggests a lifecycle process, with younger individuals less likely and older individuals more likely.
- 14. We thank a reviewer for suggesting that this was likely a gendered process, as males, who historically attended services at much higher rates, during this period decreased in attendance while females increased. This invites further connection of backlash theory to the gendered religious revivals demonstrated by Mahmood (2011).

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Supplementary material

Supplementary material is available at Social Forces online.

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Data availability

The data underlying this article is publicly available at the World Values Survey's website (Waves 2-7, 1990-2018): https://www.worldvaluessurvey.org/wvs.jsp.

The code for APC-I models, which are used for age-period-cohort analysis in this study, can be found here: https://journal.r-project.org/articles/RJ-2022-026/.

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