

# Political Secularism and Muslim Integration in the West: Assessing the Effects of the French Headscarf Ban\*

Aala Abdelgadir<sup>†</sup>      Vasiliki Fouka<sup>‡</sup>

December 2019

## Abstract

In response to rising immigration flows and the fear of Islamic radicalization, several Western countries have enacted policies to restrict religious expression and emphasize secularism and western values. Despite intense public debate, there is little systematic evidence on how such policies influence the behavior of the religious minorities they target. In this paper, we use rich quantitative and qualitative data to evaluate the effects of the 2004 French headscarf ban on the socioeconomic integration of French Muslim women. We find that the law reduces the secondary educational attainment of Muslim girls, and impacts their trajectory in the labor market and family composition in the long run. We provide evidence that the ban operates through increased perceptions of discrimination and that it strengthens both national and religious identities.

---

\*We thank Lisa Blaydes, Jean-Paul Carvalho, Lauren Davenport, Mathilde Emeriau, Jens Hainmueller, Stephane Wolton and seminar participants at the Clayman Institute for Gender Research at Stanford, the Stanford-Berkeley PE workshop, the 2019 MPSA Annual Conference and LMU Munich for useful comments and suggestions. Abdelgadir gratefully acknowledges the support of National Science Foundation through a Graduate Research Fellowship under Grant No. 2017251245. Any opinion, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

<sup>†</sup>Department of Political Science, Stanford University. Email: aala.abdelgadir@stanford.edu.

<sup>‡</sup>Department of Political Science, Stanford University. Email: vfouka@stanford.edu.

# 1 Introduction

Concerns about rising immigration and homegrown radicalization have dominated both European and US politics in recent years, fueling populist far-right parties and driving policy choices of elected political leaders. At the confluence of these two issues lies the large and growing group of Muslim immigrants which has been increasingly perceived as less desirable than other cultural and religious groups (Bansak, Hainmueller, and Hangartner 2016), difficult to assimilate (Bisin et al. 2008), and a threat to Western values (Sniderman, Hagendoorn, and Prior 2004). Either as a direct response to terrorism, or as a means of reaffirming society’s secular character in view of a new and salient religious minority, several governments have enacted policies that regulate women’s Islamic dress. As shown in Figure 1, about one third of European countries have either a local or national ban on some form of veiling, ranging from full-face covers, like the niqab or burqa, to partial ones that cover hair and sometimes neck, like the headscarf. The scope of bans’ application also varies, from restricting covering in all public spaces, to only in state or state-funded institutions (like public services, courts or schools).

[Figure 1 about here.]

Such policies have on various occasions been upheld by the European Court of Justice, and survey data indicates that bans are supported by a majority of the public in countries where they are debated or enacted.<sup>1</sup> While their intended goal often is to reduce the visibility of religion in the public sphere, policies of secularity may inadvertently have other effects on the behavior of the religious minorities they target. There

---

<sup>1</sup>A 2010 Pew Research Center poll showed that 62% of people in the UK, 82% in France, 71% in Germany, and 59% in Spain support a ban on full-face veiling. <http://www.pewglobal.org/2010/07/08/widespread-support-for-banning-full-islamic-veil-in-western-europe/>

has been little systematic investigation of bans' broader effects, and yet this question should be of paramount importance, not only to social scientists, but also to policymakers and Western societies that grapple with achieving both immigrant integration and the preservation of Western culture. To what extent are religious bans contributing toward these goals?

Research suggests reasons to doubt the efficacy of bans in assimilating immigrants. Despite approval from native populations, veiling bans are perceived as discriminatory by Muslims.<sup>2</sup> Discrimination has been robustly connected to pernicious effects on psychological wellbeing (Banks, Kohn-Wood, and Spencer 2006; Cano et al. 2016; Padela and Heisler 2010; Umaña-Taylor and Updegraff 2007; Noh and Kaspar 2003), which can negatively impact many domains of an individual's life. For Muslim women affected by veiling bans, this can imply worse school performance or impaired labor market integration.

When it comes to minorities' social and psychological integration, the effects of discrimination are less well understood. Theoretically, discrimination may weaken attachments to the discriminated group and precipitate assimilation. Equally plausibly, it may increase the sense of minority identification as a means of buffering negative effects on self-esteem (Turner and Tajfel 1986; Branscombe, Schmitt, and Harvey 1999) and trigger "reactive identity" (Rumbaut 2005, 2008). Empirically distinguishing between these possibilities is challenging because discrimination and its perceptions are endogenous to minority members' integration and identity.<sup>3</sup> Existing correlational studies have found evidence of both higher and lower engagement of minority members with majority

---

<sup>2</sup>Institut Montaigne (2016) survey a representative sample of French Muslims. They find that 60% support wearing the headscarf in schools and in other public institutions. Yazdiha (2019) finds that French Muslims report higher perceptions of discrimination than Muslims in Germany or Spain, and that French Muslim women perceive greater hostility than French Muslim men, a difference speculated to be due to veiling bans.

<sup>3</sup>Adida, Laitin, and Valfort (2014) illustrate this through lab experiments, where Muslims show reluctance to assimilate in response to discrimination, and rooted French discriminate against Muslims who they perceive as reluctant to assimilate.

society in response to institutionalized or societal discrimination (Oskooii 2016, 2018; Schildkraut 2005). Similarly ambiguous is the literature on anti-Muslim discrimination in the West. While most studies speculate that Islamophobia has led to “reactive religiosity”, empirical evidence on this remains inconclusive (Voas and Fleischmann 2012).

This paper is the first attempt to empirically identify the effect of veiling bans on a range of behavioral and attitudinal outcomes of Muslims. We do so in the context of the most famous of veiling laws, the 2004 French law on secularity and conspicuous religious symbols. The law banned the use of religious signs in primary and secondary public schools in France, and though it did not explicitly single out any particular symbol or religion (large Christian crosses, as well as Sikh turbans and Jewish yarmulkes were included in the ban), it aimed to and de facto mostly affected veiled Muslim schoolgirls. Using rich individual-level data from the French Labor Force Survey, the French census, and a representative survey of immigrants and immigrant-descendants in France, we employ a difference-in-differences strategy to isolate the impact of the law on socioeconomic and identity outcomes of Muslim women. Muslim-origin women have different outcomes from women of non-Muslim origin, but if this gap increases or decreases for cohorts young enough to have been at school when the law was enacted (compared to older cohorts that did not experience the ban), then the change can be attributed to the law’s effect.

Our main finding is that exposure to the ban significantly reduces the likelihood of completing (any) secondary education. This effect is due to disruptions in women’s educational trajectory during the period of the ban’s implementation. There is an increase in dropout rates from secondary education for Muslim women aged 17 and above – the cohorts that, by French compulsory schooling law, were legally allowed to drop out. We also find that Muslim women affected by the ban took longer to complete secondary education and were more likely to have repeated a class. The negative educational shock carries over to a number of longer term outcomes, such as

labor force participation and employment rates.

We find evidence that the law disrupted educational trajectory through increased perceptions of discrimination at school among Muslim girls. The magnitude of our estimates is too large to be explained by the relatively low number of girls estimated to have veiled at school prior to the ban. This indicates that the climate of increased scrutiny of Muslim girls' dress created by the law also affected girls who did not veil. School-aged Muslim girls only report higher discrimination in the school, but not in other contexts, such as streets, stores, or public services, speaking against broader Islamophobia triggered by the law driving our estimates. We find only a small and transitory effect of the law on school-age Muslim boys, suggesting discrimination at school was targeted against or perceived more intensely by Muslim girls.

We also find that the ban influenced identity choices. Muslim women in affected cohorts increase both their identification with France and with Islam. These results indicate a general increase in the salience of identity for affected cohorts and can be interpreted as a reaffirmation of Muslim women's belonging to both French society and their religious communities. Not all identities were strengthened equally for all women. Religious identity increased more for devout women and French identity increased more for women who, by various metrics, were initially more integrated in French society.

One of the paper's central contributions is to provide the first causal assessment of the impact of veiling laws in general and of the French 2004 law in particular. Given the increasing prevalence of these laws, the intense debate surrounding them, and increasing convergence in integration policy across Europe (Joppke 2007), a systematic positive evaluation of their effects was prominently absent.

Beyond that, we contribute to several other literatures. First, we provide new evidence on discrimination's effects on the behavior and integration outcomes of immigrants in general and Muslim immigrants in particular (Schildkraut 2005; Gould and Klor 2015; Oskooii 2016, 2018). The majority of studies on this topic lack exogenous variation in discrimination and thus do not causally identify discrimination's effects

on minority behavior. Our study contributes to this literature by isolating a causal effect of the veiling ban on Muslim outcomes and providing evidence that the effect is driven by material changes in schools that heighten perceived discrimination and dampen psychological wellbeing. And while most studies emphasize either assimilation (Fouka 2019) or alienation (Schildkraut 2005; Adida, Laitin, and Valfort 2014; Gould and Klor 2015) as a consequence of discrimination, our results show that worsened educational and socioeconomic outcomes do not necessarily go hand in hand with social alienation from majority society and that identity choices in response to discrimination are not necessarily binary. Individuals may strengthen their in-group identity, while simultaneously affirming their belonging to the majority group.

Second, we contribute to a long-standing debate on the effects of assimilationist versus multiculturalist policies, complementing existing cross-country evidence (Wright and Bloemraad 2012; Bloemraad and Wright 2014). Consistent with both theoretical and empirical accounts (Bisin et al. 2011; Carvalho 2012; Fouka, Forthcoming), we find that policies with an assimilationist character lower minority integration. Despite this, religious bans do not necessarily reduce the sense of belonging to majority society but rather lead to the reaffirmation of dual identities.

Finally, our paper also contributes to a burgeoning literature on the politics of the headscarf. Scholars document that veiled women report experiencing discrimination at higher rates relative to other Muslim Americans (Dana et al. 2018), and several papers link these discriminatory experiences to greater political activism (Jalalzai 2011; Westfall et al. 2017). We provide causal evidence that institutional discrimination differentially affects Muslim women's outcomes beyond political participation.

## 2 Context

### 2.1 Islam and laïcité in France

France is home to approximately 6 million Muslims (Mattei and Aguilar 2016). Contemporary debate over their assimilability can be traced to the 1980s, when French Muslims experienced a religious resurgence. Muslims' increased religiosity triggered public anxiety in France. Islam was associated with fanaticism and retrogradeness, due in part to media coverage conflating Islam with global fundamentalism and terrorism (Piscatoi 1990; Appignanesi and Maitland 1989; Bowen 2007). Salience of Islam was also perceived to be in conflict with France's secular tradition. France's approach to religion was shaped by historical church-state relations since the French revolution (Soper and Fetzer 2003; Mattei and Aguilar 2016). In 1905, a republican government codified the separation of the church and state, effectively enshrining the principle of laïcité (loosely translated as "secularism"). Faith has since been relegated to the private sphere and organized religion has been strongly regulated.

Laïcité was importantly enacted through the establishment of a republican education system. Religious instruction was removed from the curriculum and lay personnel became responsible for schools. With these changes, the state aimed to replace religious fealty with nationalism (Kepel 2012). Schools were and remain an important vehicle through which the state creates citizens, instilling in all children republican values (Lorcerie 2012). Within this context, the increasing religiosity of Muslim children – exemplified by pupils in headscarves, requests for *halal* food (meals prepared as prescribed by Muslim law), and refusal to engage in certain activities (like co-ed physical education) – was perceived as an assault on the very institution instilling republican values (Bowen 2007).

## 2.2 The headscarf ban

Tension between Muslim pupils' increased religiosity, most clearly manifest in girls veiling, and the French tradition of *laïcité* culminated in several crises focused on the headscarf. School principals and administrators, to varying degrees, tried to combat veiling among Muslim pupils. These daily battles erupted onto the national stage with the 1989 headscarf affair, an event which instigated government intervention. In 1989, three veiled Muslim girls were expelled from Gabriel-Havez middle school for infringing on the neutrality of public schools. The students filed suit against the school, and the case reached the Conseil d'Etat (French Supreme Court of administrative law). Ultimately, the court ruled that girls had the right to veil unless their headscarves were disruptive, and it instructed schools to determine disruptiveness on a case by case basis (Mattei and Aguilar 2016). In 1994, minister for education François Bayrou issued a circular reinforcing the court's decision and set up a ministerial office to mediate between schools and pupils in headscarf cases (Winter 2009).

In 2003, when headscarf expulsion persisted, the government convened the Commission to Reflect on the Application of the Principle of Secularism in the Republic. The Stasi Commission – a group of public intellectuals and politicians – conducted expansive consultations. Educators reported that headscarves jeopardized the liberating mission of schools “to give citizens-in-the-making the means to free themselves from social, cultural, ethnic or gendered determinism” (Bowen 2007). Veiling, they argued, impinged on the liberty of conscience of other pupils, and represented the triumph of communitarian pressures (Bowen 2007). After hearing submissions from over 100 stakeholders, the commission published the Stasi Report (2004), where it advocated state intervention, including among other suggestions a ban on veiling in schools.

In 2004, the French parliament passed a bill banning conspicuous religious symbols in schools. The bill broadly prohibits ostentatious religious symbols, including large crosses and yarmulkes. Headscarves were the intended target of the law and the main symbol affected by the law in practice, given their relative prevalence as compared to



other religious symbols (Paul 2004). The bill went into effect in September 2004 in primary and secondary public schools.

While no systematic study of the ban exists, there are a few lessons about its impact. The French government sponsored a study on the law's application. The Chérifi report studied four public schools and documented a decrease in veiling and expulsions (Chérifi 2005). At the start of the school year in 2004, only 639 out of 10 million students showed up wearing ostentatious religious symbols, 626 of whom were Muslims (Mattei and Aguilar 2016).<sup>4</sup> Of the 639, 143 students switched from public to private schools and 50 enrolled in long-distance courses (Mattei and Aguilar 2016).

### 3 Conceptually linking religious bans to minority outcomes

How would we expect the 2004 ban on religious symbols to affect the choices and outcomes of French Muslim women? We form our expectations based on a rich interdisciplinary literature, as well as semi-structured interviews with Muslim women conducted by one of the authors in Paris in July and August 2011.<sup>5</sup>

**Educational outcomes.** The law's differential impact on Muslim girls could have impaired educational outcomes through two channels. The first one is school-specific. The law changed the reality in schools for Muslim girls, both veiled and unveiled. For veiled schoolgirls, it authorized differential treatment by instructing school administrators to single them out and subject them to scrutiny over their mode of dress. Moreover, the law imposed sanctions on veiled girls who persisted in wearing the headscarf. As a first step, girls were removed from their classes to discuss alternatives to veiling with school administrators (Mattei and Aguilar 2016). If this negotiation failed, girls were

---

<sup>4</sup>This compares to 2-3000 instances of wearing religious symbols in 1994-1995, and 1465 instances in 2003-2004 (Mattei and Aguilar 2016; Open Society Institute 2007).

<sup>5</sup>Information about sampling strategy and data collection is provided in Appendix Section D.

expelled with few other educational options: they could leave the education system (if older than 16), switch to private school, pursue distance learning, or leave the country.

The role of educational disruptions through mediation and expulsion of veiled girls is highlighted in our interviews. Twenty-eight-year-old Nadia shared her own experience.<sup>6</sup> Nadia started veiling at 13. Her teachers tried and failed to convince her to unveil. The school then suspended her and engaged a government mediator to resolve the impasse. Her parents, concerned about her education, ultimately convinced her to unveil and she returned to school. Nonetheless the protracted mediation process led her to fall behind relative to her peers. Her experience illustrates how outlawing veiling in schools directly disrupts the educational trajectories of veiled Muslim girls, with the potential to undermine their academic performance.

Besides its direct impact on veiled girls, the law altered the overall environment in schools. Officials in the Education Ministry noted within schools “a newly aggressive climate toward Muslims” to eradicate religious symbols (Bowen 2007). Our interviews illustrate that this greater scrutiny and more aggressive school environment likely undermined psychological wellbeing for all Muslim schoolgirls, including those who did not veil. Interviewees in school during the 2004 law reported greater focus on them and their choices. One respondent, a university student in 2004, observed within her community that Muslim girls became the center of attention and “lost support in school”. A significant literature demonstrates that incidents perceived as discriminatory (differentially targeting one’s group) are associated with mental distress, in the form of anxiety, stress, depression, and low self-esteem (Banks, Kohn-Wood, and Spencer 2006; Cano et al. 2016; Padela and Heisler 2010; Coker et al. 2009). A lawyer who defended Muslim girls in school expulsion cases explained, “For those who remained [in school], there was an enormous psychological effect. They are made to feel like culprits but

---

<sup>6</sup>Names have been changed to preserve anonymity. Her expulsion occurred prior to the 2004 ban, when an education circular enabled schools to decide their own regulations. She attended a school that prohibited veiling.

they have done nothing. Despite that, they are humiliated, and [they] do not understand why they are insulted or made to feel like outsiders.” Both veiled and unveiled respondents indeed recall feeling “dirty”, “not accepted”, “alienated”, and “ashamed”. In line with studies that directly link discrimination to impaired educational outcomes (Levy et al. 2016; Chavous et al. 2008), we expect that the school climate’s negative effects on psychological wellbeing adversely impacted educational performance.

A second plausible channel for the law’s effects is through the public debate that it spurred over veiling, which contributed to greater scrutiny over Muslims. Media coverage and elite discourse linked the headscarf to communitarianism, Islamism, and sexism (Bowen 2007) and presented it as a threat to women’s rights and French republican values (Deltombe 2005). It is plausible that such discourse and associated Islamophobia would impact those identifiable as Muslim, consistent with a literature showing that characteristic Muslim features such as names, or attire, are associated with increased bias in observational and experimental contexts (Park et al. 2009; King and Ahmad 2010; Adida, Laitin, and Valfort 2010, 2014). For such effects to be picked up by our identification strategy, they would have to differentially impact school-aged cohorts of Muslim girls.<sup>7</sup>

**Identity.** Besides direct effects on educational outcomes, the 2004 ban could have impacted social and group identity.<sup>8</sup> The law increased the salience of both Muslim and French identities and, to some, defined the Muslim headscarf as a “violation of French secularism, and by implication, a sign of the inherent non-Frenchness of anyone who practiced Islam, in whatever form” (Scott 2009). Casting the two identities as incompatible could have led French Muslim girls, who until that point readily identify

---

<sup>7</sup>School-aged cohorts overlap to some extent with the formative years of adolescence and early adulthood. The effects of discrimination during those years are particularly pernicious (Bergman and Magnusson 1997; Cairns, Cairns, and Neckerman 1989; Steele and Aronson 1995).

<sup>8</sup>Clearly, effects on identity could feed back into women’s other outcomes. For example, a strengthening of religious identity that would manifest as a retreat from French society could negatively impact labor force participation in the long run.

as members both of their religious community (perhaps by wearing the headscarf) and of France (their country of birth), to identify more with one or the other group.

The literature's findings on the relation between perceived discrimination and identity are decidedly mixed. On the one hand, research in social psychology shows that exclusion from a group can increase identification with that group (Gomez et al. 2011). The need of French-born girls to belong and avoid discrimination might have led them to disassociate from their religious and ethnic communities and emphasize their Frenchness (Fouka, Forthcoming). Increased identification with the majority in response to discrimination would be consistent with patterns in aggregate data. For example, despite pervasive discrimination against them (Duguet et al. 2010; Valfort 2018; Pierné 2013), Muslims report feeling closer to French people than to members of their own religion or nationality (Laurence and Vaisse 2006).

On the other hand, perceived discrimination can lead individuals to disengage behaviorally and attitudinally from the discriminating majority (Schildkraut 2005; Kunst et al. 2012; Fleischmann and Phalet 2018). Reactive identity theory (Rumbaut 2008; Portes and Rumbaut 2001) even emphasizes the reaffirmation of minority identity in response to hostility by the majority, with a number of studies providing empirical evidence in support of it (Peek 2005; Haddad 2007; Connor 2010; Nagra 2011; Kabir 2012). Specifically, studies of Muslims have speculated "reactive religiosity" in response to Islamophobia, perhaps because religion uniquely helps individuals deal psychologically with low self-esteem caused by discrimination (Ysseldyk, Matheson, and Anisman 2010).<sup>9</sup> According to these theories, Muslim girls could have retreated from French society, particularly the school system, the site of direct discrimination.

A third theoretical possibility is that women rejected the choice between identities and reasserted their right to be both French and Muslim. Oskooii (2016, 2018)

---

<sup>9</sup>Religion acts as a means of dealing with discrimination not only for Muslims (Ghaffari and Ghaffari 2010; Verkuyten and Yildiz 2007) but also for Christians (Aydin, Fischer, and Frey 2010).

finds that institutional discrimination increases Muslims' political engagement, while simultaneously strengthening their engagement in their ethnic and religious communities. Relatedly, Beaman (2015, 2016) shows that middle-class Muslims are adapting religious practice to gain acceptance in French society and maintain religious identity.

Interviews also point to the potential for different reactions to the law. Though respondents generally viewed the law as forcing “a choice for Muslims: concede your faith or recede from French society,” they responded in diverse ways. No interviewee conceded her religious and ethnic identities, but several cited women in their communities who stopped veiling after the law.<sup>10</sup> Some interviewees did choose to integrate on their own terms, by maintaining their veils and French values. As one respondent put it, she was born in France, she speaks the language, and she respects the laws, and therefore she was as French as any other citizen.<sup>11</sup> To affirm their dual identities, several interviewees engaged in activism at university or through civic associations. One such activist explained, “But for me, I think that it [disengaging from French society] is not the solution at all. I think it is necessary to cling on... when you hang on, you make advancements.”

In contrast, other respondents chose to retreat into their Muslim identity. Several respondents observed members of their communities becoming more conservative as an “identity reflex”. One respondent explained that “some girls put on the hijab as an act of resistance because they felt attacked”. Another interviewee linked this conservative reflex directly to the law, stating “When you stigmatize a community, people in the community will move toward extremism.” Retreat from French society was expressed in a myriad of ways, like attending a school where children of immigrants predominate, applying to work in Muslim-owned businesses, and moving to immigrant-dominated

---

<sup>10</sup>The absence of women who disinvested in their religious or ethnic identities is a function of the sampling strategy. Respondents with high religious and ethnic affinities were specifically sought out. For more on the sampling strategy, see Appendix Section D.

<sup>11</sup>Ethnographic work documents how middle-class Muslims adapt in view of rising Islamophobia because they see themselves as French (Beaman 2016).

suburbs. One woman who left work altogether and began wearing the burqa presented her decision as a response to the specific targeting of Muslims: “You can do what you want without limitations if you have bad intentions. But there is persecution [of those who want to do good]. It is the hypocrisy of France. They teach in schools [that we are free] but then they close off all of your options; they do not accept you at all [if you do not conform].”

**Heterogeneous effects.** The multiplicity of identity responses highlights a theme prominent in the literature studying discrimination: that baseline identity moderates both the actual experiences and perceptions of discrimination, as well as its effects. Women with a stronger religious identity could be subject to more discrimination, but could also be more likely to label ambiguous encounters as discriminatory (Dana et al. 2018). At the same time, stronger religious identities could mitigate the negative impact of discrimination on wellbeing (Branscombe, Schmitt, and Harvey 1999). Depending on the dominant mechanism, the effect of the law on educational outcomes could have been stronger or weaker for Muslim girls who initially identified more with their religious communities.

Similarly, the initial degree of minority identification has ambiguous effects on the identity response to the ban. For individuals fused with a group, studies have found both that exclusion increases compensatory behavior the most (Gomez et al. 2011), but also causes the greatest disengagement (Schildkraut 2005). Theory thus provides little guidance on the heterogeneous identity impact of the law by initial degree of religious and national identification.

**Summary of hypotheses.** In sum, we hypothesize that the headscarf ban depressed educational attainment primarily through disruptions in the classroom for veiled Muslim girls and through perceived discrimination and psychological distress for all Muslim schoolgirls. We also hypothesize that the ban impaired labor market outcomes in the long run, as a direct result of its negative effect on Muslim girls’ educational attainment. We expect that the law affected French, ethnic, and religious

identity, without a clear prior as to the direction of average effects. Lastly, we expect that the initial degrees of devoutness and integration moderate the effects of the law on education and identity.

## 4 Data and empirical strategy

### 4.1 Data

We utilize two datasets in our main analysis of the ban’s effect on educational attainment, long-term labor and social outcomes, and identity.

**French Labor Force Survey.** Our main data source is the French Labor Force Survey (Enquête Emploi, and henceforth LFS). The LFS is a comprehensive survey of socioeconomic and labor market characteristics conducted in a representative sample of the French population. It is a rolling panel, with each household surveyed six consecutive quarters. For most of our analysis, we keep an individual’s first quarterly observation, thus treating the survey as a repeated cross-section. We rely on the father’s region of birth to identify Muslim women.<sup>12</sup> We identify “Muslims” as those whose fathers are born in the Maghreb or Middle East, and drop from the sample regions which contain countries with and without a significant Muslim population (such as Rest of Africa). Our sample comprises French-born respondents, aged 20 or older in each survey year so that we can examine completed education and labor market characteristics, and interviewed 2005 to 2012, survey years measuring both respondents’ and fathers’ place of birth. Our cross-sectional sample consists of 52,201 observations, including 4,163 Muslims.

**Census Microdata.** To verify the LFS results, we use the 2011 1% sample of the French census microdata, which is part of the International Integrated Public Use Microdata Series (IPUMS International). We identify Muslim women as those whose

---

<sup>12</sup>Islam is patrilineal, passed on through the male line.

fathers were born in the Maghreb or Turkey, and non-Muslim women as those whose fathers were born in Europe. Father’s nationality is only available for women who live with their fathers, so the dataset is unrepresentative of the population. More details on this data source are provided in Appendix Section B.4.

**Survey *Trajectories and Origins*.** To investigate identity responses and the mechanisms underpinning the ban’s effects, we use the Trajectories and Origins survey (Trajectoires et Origines, henceforth TeO). TeO was conducted in 2008-2009 on a sample of 21,000 people, including representative samples of immigrants, descendants of immigrants, and non-immigrant French. We identify treated and control groups using self-reported religious adherence.<sup>13</sup> We restrict attention to women born in France.

A description of all variables is provided in Appendix Section C.1. Tables C.2 and C.3 provide summary statistics.

## 4.2 Identification strategy

To evaluate the effects of the headscarf ban, we employ a difference-in-differences analysis. We compare the difference in outcomes between Muslim and non-Muslim women for cohorts in school during the ban versus cohorts who completed school before the ban. Students in France attend secondary education between ages 11 and 18. Attendance is compulsory by law until age 16. Upper secondary education either prepares students for a vocational or technical diploma (like BEP or CAP) and lasts until age 17, or prepares students for a high school degree, or *baccalauréat*, and lasts until age 18. We, therefore, assume that women born in 1985 or earlier, who were 19 or older in 2004, left secondary education before the law and were thus unaffected. Any cohort born in 1986 or later likely had at least one year of education under the new law.<sup>14</sup>

---

<sup>13</sup>We also use the TeO to validate our approach for identifying Muslims in the LFS and IPUMS: the correlation between self-reported Islamic religion and an indicator for father born in a Muslim-majority country in the TeO sample is 0.7403.

<sup>14</sup>Figure A.1 in the Appendix shows that close to 80% of women aged 18 were enrolled in secondary education in 2003, the year before the implementation of the ban. This share drops to 40% for those



These younger cohorts of Muslim girls constitute our treatment group. The distinction between treatment and control group is not sharp – some girls born after 1985 may have left school before the ban’s implementation – but this only introduces measurement error that would bias estimated effects toward zero. We always restrict our focus to cohorts born 1980 or later, to ensure roughly equal cohorts on either side of the 1986 cutoff.

Our simplest specification takes the form:

$$Y_{icg} = \alpha_1 + \alpha_2 T_{cg} + g_g + c_c + \epsilon_{icg} \quad (1)$$

where  $i$  indexes individuals,  $c$  indexes birth cohorts, and  $g$  indexes groups based on the father’s region (LFS) or country of birth (IPUMS), or the individual’s religion (TeO).  $T_{cg}$  is an indicator for individuals identified as Muslim and who were 18 or younger in 2004 (born 1986 or later).  $g_g$  and  $c_c$  are group and birth cohort fixed effects, respectively, and  $\epsilon_{icg}$  is an idiosyncratic error term. The coefficient of interest is  $\alpha_2$ , the differential treatment effect of the ban on school-age cohorts of Muslim women. When using the LFS, we control for birth year, survey year, and age fixed effects, since we observe the same birth cohorts multiple times. Our preferred specification also includes father’s region of origin by age fixed effects, since many educational and labor force outcomes follow a different age profile for Muslim vs non-Muslim women.<sup>15</sup>

**Threats to identification.** The validity of the difference-in-differences approach relies on two identifying assumptions. First, outcomes of Muslim and non-Muslim women would have followed parallel trends in the absence of the law. This assumption cannot be tested directly, but data for older cohorts demonstrates the absence of differential pre-trends in outcomes before the law. This rules out the possibility that

---

aged 19 and to 20% or less for older cohorts.

<sup>15</sup>Throughout, we cluster standard errors at the father’s place of origin or at the religion level. Because this leaves us with a small number of clusters (between 7 and 14), we verify that our results are robust to using the wild bootstrap procedure (Cameron, Gelbach, and Miller 2008).

school-age Muslim women's behavior was already changing for reasons unrelated to the headscarf ban.

Second, there can be no time-variant unobservable factors that coincide temporally with the headscarf ban and differentially affect Muslim women. This assumption is unlikely to be violated because we are exploiting birth cohorts as a central dimension of time variation. Any time-variant confounder would have to differentially affect Muslim girls under the age of 18. We are not aware of changes in legislation or rules relating to the educational system that could be correlated with the 2004 ban. To the extent that the law spurred anti-Muslim sentiment that also affected older Muslim women, we would be estimating a downward biased differential effect of the law on school-age Muslim women.

A concrete time-varying unobservable confounder is a source of discrimination unrelated to the law, such as Islamophobia spurred by the 9/11 attacks and still prevalent in later years. However, even if such discrimination differentially affected younger cohorts, it would not have manifested in a sharp break in the educational attainment of cohorts just old enough to be in school in 2004. In Appendix Section B.1, placebo exercises show that no cohort born before 1986 displays a significant drop in secondary educational attainment, as we would expect if other sources of discrimination, and not the ban, explained our findings.

Finally, it is worth emphasizing that we lack information on who veiled in 2004 and was thus *treated* by the law in the strictest sense. We also lack information on discriminatory treatment of Muslim schoolgirls, which constitutes an additional component of the law's effect. What we are identifying is the effect of the law on school-age women who either report being Muslim (TeO) or whose fathers were born in an identifiable Muslim-majority region or country (LFS, IPUMS). To the extent that school-age Muslim women who did not veil or did not experience discrimination were unaffected by the 2004 ban, we would expect an additional downward bias in our estimates. In short, the potential spillover effects of the law and the lack of precise information on veiling

practices and experiences of discrimination at school contribute to estimated treatment effects being a lower bound of actual effects.<sup>16</sup>

## 5 Effects on educational attainment

The first order effect of the 2004 law should be traceable in educational attainment. Figure 2 depicts patterns of secondary school attainment for Muslim and non-Muslim women in the LFS. The upper panel plots the share of women who completed secondary education in the raw data. We define secondary completion as finishing *any* secondary education and attaining a vocational degree (CAP, BEP or similar) or higher. Secondary attainment of Muslim women is generally lower, but follows a parallel trend to non-Muslim women for older cohorts, thus providing support to the main identifying assumption of the difference-in-differences strategy. This pattern ends abruptly with the group born in 1986, precisely the first cohort old enough to be affected by the ban while at school. The lower panel of Figure 2 plots residuals of the likelihood of having completed secondary education, conditioning on age and survey year fixed effects. It confirms the pattern in the raw data. The gap between Muslim and non-Muslim women more than doubles for the 1986 cohort, and remains large thereafter.

[Figure 2 about here.]

The most negative impact of the law is felt by cohorts aged 16-18 in 2004. This is not surprising. First, one would expect negative effects on wellbeing associated with the removal of the headscarf to be concentrated among older adolescents, who were more likely to be veiled and to have worn the headscarf for longer. Second, cohorts above the age of 16 were legally allowed to drop out of school and could have done so

---

<sup>16</sup>It is also worth noting that prior to the 2004 law, headscarves were regulated school by school, as established by an earlier ministry of education circular. That some schools did not accommodate veiling prior to 2004 should be an additional factor biasing our estimated effects downwards.

in response to perceived discrimination. In Appendix Section B.3, we provide direct evidence for increased dropout rates among older treated cohorts.

Table 1 clarifies the magnitude and demonstrates the robustness of the graphical result. Column (1) reports the interaction coefficient from equation 1, which indicates that the difference in the likelihood of completing secondary education between Muslim and non-Muslim women becomes almost three percentage points larger for school-age cohorts. The effect remains unchanged when including survey year fixed effects in column (2). In column (3), we control flexibly for age by father’s birthplace fixed effects, effectively allowing women from different origins to have different age profiles in terms of when they complete secondary education. This increases the magnitude of the estimated coefficient. In column (4), we include a linear Muslim-specific trend in birth year. The coefficient remains robust and further increases in magnitude. This increase likely captures a fact that can be observed in the lower panel of Figure 2: conditional on age, Muslim women born before 1986 were catching up with their non-Muslim counterparts in terms of secondary educational attainment.

The estimated effects are large. The magnitudes imply that the difference between Muslim and non-Muslim women in secondary attainment more than doubles. Our preferred specification, reported in column (3), implies that we can attribute to the veiling law a differential increase in the share of Muslim women who fail to finish any secondary education of 3.9 percentage points, which corresponds to 20% of the overall share of women without secondary education in our sample (19.1%).

[Table 1 about here.]

Finally, column (5) investigates a source of the effect’s heterogeneity: the origins of the parents. The drop in secondary educational attainment is double in magnitude for women with both parents born in Muslim-majority regions, compared to those with a Muslim father and a non-Muslim mother. Parental origin may proxy for two things. The first is the intensity of the treatment – girls born in Muslim families are more likely to wear the headscarf or to be identifiable as Muslim and thus to have been

directly affected by the ban. The second is the strength of religious identity, which may enhance perceptions of discriminatory treatment and amplify any negative effects on psychological wellbeing and school performance.<sup>17</sup>

We perform a number of checks to validate the estimated effect of the ban on secondary school attainment. We find no negative effects on education for school-age cohorts of women with non-Muslim immigrant parents, which speaks against general xenophobia or other confounders potentially affecting second-generation immigrants at school. We show that the effect is not driven by other changes coinciding temporally with the headscarf ban, such as Islamophobia spurred by the 9/11 attacks, or by imbalances across the sample of Muslims and non-Muslims. We also assess the sensitivity of our results to different definitions of secondary school completion. A detailed description of robustness checks is available in Appendix Sections B.1 and B.2.

We show that the negative effect of the law on women’s educational outcomes works through two channels. First, Muslim girls are more likely to drop out of secondary education. Second, girls who remain in school take longer to complete secondary education. We summarize these results here and provide detailed analysis in Appendix Section B.3.

LFS data reveals that Muslim women in treated cohorts were significantly more likely than their non-Muslim counterparts to be enrolled in secondary education at any given age, which indicates that it took them longer to complete secondary education (Figure B.3). The effect is large enough to explain the entire difference in secondary enrollment rates among 20-year olds (7.9% for non-Muslims vs 13.3% for Muslims). Exploiting information from TeO, we find that treated Muslim women are more likely to have repeated a class and more likely to have attended a school outside their designated school district because of the religious beliefs of their parents (Table B.5).

We use the panel nature of the LFS to examine how the student status of Muslim

---

<sup>17</sup>The TeO data indicates that women with two Muslim parents are indeed more religious and have a less assimilated profile. The correlation with having two Muslim parents is 0.48 for religiosity, -0.36 for linguistic assimilation and -0.37 for psychological assimilation.

women changed after 2004. Using specifications of the form of equation 2, described in Appendix Section B.3, we find that Muslim women are 6 percentage points more likely to drop out of secondary education between 2003 and 2004 (Figure B.4 and Table B.6). This effect explains up to 60 percent of the long-run average rate of leaving secondary in our data (11.8%).

## 6 Effects on long-run integration

### 6.1 Socioeconomic outcomes

We next proceed to examine how the headscarf ban affected long term outcomes. We repeat the analysis presented in Table 1 using as dependent variables a number of different outcomes: labor force participation, employment, co-habitation with one's parents, marital status, and number of children. In Table 2, we estimate our preferred specification of equation 1, which includes age fixed effects interacted with father's birthplace. Affected cohorts of Muslim women are almost 3 percentage points more likely to be out of the labor force and 3.7 percentage points less likely to be employed. They are also 2.4 percentage points more likely to live with their parents. Finally, while we find a small (negative) difference in the likelihood of marriage, affected cohorts are almost 4 percentage points more likely to have children.

[Table 2 about here.]

The effects are substantial. When comparing them to the difference between Muslim and non-Muslim women among untreated cohorts, the estimated magnitudes indicate that the veiling law widens the employment gap by more than a third (initial gap of 10.9%) and the labor force participation gap by more than half (initial gap of 5.3%). The gap between Muslims and non-Muslims in cohabitation with parents also increases by more than a third of the initial gap of 6.9%.

Reassuringly, we find similar patterns when we replicate our results in the 2011 1% sample of the French census (Table B.7 in the Appendix). In that data, the law is

estimated to differentially reduce secondary completion rates by 2.9 percentage points for treated cohorts, a magnitude essentially identical to that estimated in the LFS. Negative effects on labor force participation and employment rates are also very similar. This is encouraging, as it suggests that results are not sensitive to the precise definition of the Muslim and non-Muslim groups nor to the representativeness of the sample. A more detailed discussion of IPUMS results is provided in Appendix Section B.4.

## 6.2 Identity

We next use the TeO data to examine whether the 2004 ban had an impact on social identity. Figure 3 reports differential effects on various self-reported measures of identity for school-age cohorts of Muslim women.<sup>18</sup> While treated cohorts are less likely, though not significantly so, to report that they are seen as French or that they feel at home in France, they are significantly more likely to identify as French. They are also more likely to identify with the father’s country of origin, though this outcome is only available for a small subset of observations and is estimated with noise. We also find that religious identity, proxied by an index of religiosity, is strengthened in response to the law.<sup>19</sup> Existing theories of oppositional identity formation (Bisin et al. 2011) and reactive identity (Rumbaut 2008) emphasize the strengthening of one out of several, presumed to be incompatible, identities in response to discrimination. Our results provide a more nuanced picture. The headscarf ban may have cast Muslim identity as incompatible with French ideals, but the TeO results suggest that Muslim women respond to this by reaffirming their belonging to both France and their ethnic and religious communities. These results resonate with those in Oskooii (2018), who finds that perceptions of institutional discrimination against Muslims are correlated with

---

<sup>18</sup>Table A.1 in the Appendix reports the magnitudes associated with these effects.

<sup>19</sup>We compute religiosity as an average of the following (standardized) items in the TeO: importance of religion in respondent’s life, wears ostentatious religious symbol, respects religious dietary restrictions, importance of religion in education received, frequency of religious practice.

increased political participation and higher mosque attendance.

[Figure 3 about here.]

One way of interpreting these findings, together with our interview data, is as pointing to a new mode of identity formation in migrant-receiving societies. Native-born children of immigrants redefine what it means to be a citizen of a Western country, by asserting that existing notions of national identification should be modified to incorporate their cultural and religious differences.

## 7 Mechanisms

### 7.1 Discrimination in the school

To investigate whether discrimination while at school was a key mediator for the observed effects on Muslim girls' outcomes, we directly examine perceptions of discrimination of treated cohorts using the TeO survey. Figure 4 plots the interaction coefficient from equation 1.<sup>20</sup> Affected cohorts are significantly more likely to say that they experienced racism (i.e. insults or harassment) in school. They are also more likely to report lower trust in the French school.

[Figure 4 about here.]

Following social psychology literature (e.g. Conklin (2011) and Coker et al. (2009)), heightened perceptions of discrimination in school could have negatively impacted educational performance by depressing psychological wellbeing. The TeO does not contain questions about mental health. We use instead questions about general health to investigate this pathway. We find tentative evidence that treated cohorts experienced worse

---

<sup>20</sup>Table A.2 in the Appendix reports the magnitudes associated with these effects.



health outcomes. Table A.3 in the Appendix shows that treated cohorts report (not significantly) lower levels of subjective health (Column 1). The effect is strongly significant when we examine a binary indicator for respondents who say that their health is bad or very bad (Column 2). We further investigate health disparities between treated and control cohorts through questions on types of health problems and ages at which they started. We construct an indicator for individuals whose health problems relate to life conditions or difficulties in private life and whose problems appeared while they were at school age. Treated cohorts are significantly more likely to report health problems related to these two domains while at school age (Column 3). As a falsification test, we examine health problems related to pre-existing health conditions, pregnancy (Column 4), or work (Column 5). No effect is found for the first two types, though there is noisy indication of higher incidence of work-related problems. Taken together, these patterns provide evidence that the ban may have operated through a health-related pathway.

## 7.2 Law and public debate

An alternative mechanism through which the law could have affected Muslim school-girls is the broader debate it spurred around the headscarf and Muslims in France. Figure A.2 depicts annual counts of articles in French newspapers focused on veiling. One observes large spikes in 2003 and 2004, corresponding to the government convening the Stasi Commission to investigate school veiling and the passage of the headscarf ban, respectively. To the extent that the public discussion adopted an anti-veiling and anti-Muslim tone, broader hostility and discrimination against Muslims could have ensued.

That such generalized anti-Muslim sentiment drove the effects we estimate is a priori unlikely. Our identification relies on cross-cohort variation in exposure to the law at school and both the raw data (Figure 2) and our placebo exercises (Table B.1) indicate that the drop in secondary education manifests sharply for school-age cohorts. Even if generalized hostility against Muslims differentially affects younger cohorts who are

more impressionable (Krosnick and Alwin 1989), there is no reason for a sharp break in secondary completion rates to manifest for women aged 18 or younger.<sup>21</sup>

Additional evidence suggests that our estimates are not driven by broader anti-Muslim debate. First, one would expect anti-Muslim sentiment differentially impacting impressionable adolescents to also affect, to some extent, Muslim men's outcomes. There is limited evidence for that in our data. Figure A.3 replicates Figure 2 for Muslim men. One observes a dip in the secondary completion rates of Muslim men that is smaller in magnitude than that of women and more noisily estimated. Table A.4 confirms this pattern. Conditioning on origin-specific age trends and linear trends, there appears to be no systematic effect on Muslim men's education. Table A.5 also indicates that there was no increase in dropout rates of Muslim men after the ban.

Second, if broader anti-headscarf sentiment drove results, one would also expect affected cohorts to have experienced additional hostility and scrutiny more generally. Using TeO information, Table 3 shows that affected Muslim girls experienced more racism in school, but not in other contexts. If anything, the likelihood of experiencing racism at work or in the street is lower for affected cohorts (a result consistent with older cohorts of Muslim women, who had left school, experiencing increased discrimination in those contexts). This result strongly suggests that the law's impact was felt by Muslim girls through differential treatment in the school, and not through differential higher frequency of (actual or perceived) discrimination by the broader society.

[Table 3 about here.]

Lastly, we attempt to approximate a counterfactual of public debate about covering without associated legislative action. A 1993 school incident involving veiled girls instigated significant controversy around the headscarf, culminating in a 1994 ministerial circular. The circular reaffirmed the status quo in schools: non-ostentatious religious

---

<sup>21</sup>Formative years encompass late adolescence and young adulthood and range roughly from 14 to 24 (Ghitza, Gelman, and Auerbach 2019).

symbols are allowed, but schools have ultimate responsibility to regulate veiling. In Appendix Section B.5, we analyze the 1994 circular’s effect on women’s educational attainment. We replicate the analysis of the 2004 law, but define treated cohorts as those born 1976 or later, and thus in school during the 1994 debate. Figure B.7 and Table B.8 suggest a dip in secondary attainment of treated cohorts that is insignificantly estimated and one third the magnitude of the 2004 ban’s effect. Furthermore, unlike the 2004 law, the 1994 controversy had, if anything, a transitory effect, with secondary attainment rates returning to their long-run mean for younger cohorts. Even this effect may overestimate the impact of public debate, since the circular, albeit not binding, did likely change material conditions in schools.<sup>22</sup> All in all, this analysis suggests a limited role for public debate without legislative action in affecting Muslim women’s outcomes.

### 7.3 Heterogeneous effects

There are reasons to expect that the effects of the ban varied by women’s initial religiosity and integration into French society. More religious and less integrated Muslim girls may have experienced or perceived greater discrimination, with more negative effects on educational outcomes. More devout women may also have been more likely to veil and thus to be affected by the law in the strictest sense.

Estimating heterogeneous effects is a challenge because all measures of religiosity or assimilation in the 2008 TeO survey are post-treatment, and thus potentially affected by the ban. To circumvent this problem, we use information from control cohorts to identify plausible pre-treatment predictors of religiosity and assimilation. We measure religiosity by the index presented in Figure 3 and focus on two dimensions of assimilation: psychological and linguistic (Harder et al. 2018; Emeriau and Laitin 2018). The first one is measured as average agreement with the statements “I feel French”, “People

---

<sup>22</sup>Expulsions appearing in front of tribunals rose to about 100 after the 1994 directive (Winter 2009).

see me as French”, and “I feel at home in France”. We measure linguistic assimilation as an average of three indicators: French is the language most frequently used in the family, spoken with the spouse, and used between the respondent and their children.<sup>23</sup> As potential pre-treatment predictors of religiosity and assimilation, we consider characteristics of respondent’s parents and household situation prior to attending school. Given the “wide” nature of our data, with relatively few observations and many potential explanatory variables, we use LASSO to identify predictors. We then create measures of *predicted* religiosity and assimilation by computing fitted values using the models identified by LASSO. These predicted measures are entirely based on pre-treatment characteristics of respondents and thus not subject to bias.<sup>24</sup>

Table 4 presents estimates of heterogeneous effects on educational attainment by predicted religiosity and assimilation. The effect of the ban is exacerbated for more devout individuals and mitigated for those with higher psychological or language integration. Religiosity is a proxy for veiling and could thus capture the intensity of the treatment. More religious and less assimilated groups could also have experienced more intense discrimination, with more negative effects on schooling outcomes. This might be because these groups are more identifiable as Muslim (Adida, Laitin, and Valfort 2010, 2014). Indeed, experiences of racism at school for treated cohorts are significantly higher for more devout women. The differential increase of the likelihood of perceiving racism is 32 percentage points for a women at the lower decile of devoutness and 39 percentage points for those at the highest decile. The results are consistent with the finding in Column 5 of Table 1 that the law’s effect was more negative for women with two Muslim parents, as such women are more religious and less assimilated on average.

[Table 4 about here.]

---

<sup>23</sup>Maxwell and Bleich (2014) show that French language use predicts French identification.

<sup>24</sup>Appendix Section C.3 provides details on the procedure and variables.

We present heterogeneous effects on identity in Table A.6. One finding that emerges is that both identification with France and religiosity increase on average for all treated women. This suggests that the law does not increase identity polarization among Muslims. Instead, Muslim women respond to the law by reaffirming their belonging to both France and their religious communities.

The extent of increased identification, however, moderated by devoutness and assimilation. Devout women’s identification with France increases by less.<sup>25</sup> Their degree of religiosity is instead strengthened. The opposite pattern is true for more assimilated women. These results are consistent with other studies that find a strengthening of minority identity in response to discrimination among the least assimilated individuals (Fouka, Forthcoming) or, conversely, a strengthening of majority identity among the most assimilated subgroups (Fouka 2019; Williams and Sommer 1997).

## 8 Discussion and conclusion

Do bans on religious expression affect minority integration? In this paper we systematically investigate the effects of the 2004 French headscarf ban and show that the educational outcomes and economic integration of Muslim women was negatively impacted by the law. Group identity was also affected, with both French and religious identities becoming stronger for affected Muslim women. These effects are moderated by existing identities: identification with France increases more for initially more assimilated women, and increase in religiosity is instead higher for the more devout.

We emphasize the role of discrimination as the mediator of observed effects most supported by our evidence. It does not, however, exhaust the set of potential channels at work. The headscarf ban may affect outcomes by interfering with other functions that veiling performs for women who use it.

---

<sup>25</sup>For the most devout women in our sample, there is even evidence of lower identification with France. The average effect on this outcome is -0.079 for the most devout women in the sample.

There is evidence that Muslim women wear pious dress to signal religiosity (Patel 2012), perhaps due to marriage market considerations (Blaydes and Linzer 2008), or as a commitment device that affirms religiosity to the community and allows them to participate in broader society (Carvalho 2012). In response to the ban, religious parents could have driven substitutions away from veiling to other forms of religious commitment for affected school-age girls. Such behaviors could have had a lasting impact on girls' religiosity and associated attitudes toward female education or labor force participation.<sup>26</sup> It is, however, unlikely that these channels explain the magnitude of our results, given the low estimated number of veiled girls in school before the ban (Winter 2009). Neither can these mechanisms readily explain the strengthening of French identity among treated cohorts.

At this point, it is important to highlight our study's limitations. We focus on the ban's implementation and its effects on cohorts directly impacted at school. We do not examine the effect of the law on cohorts entering the educational system with the ban already established. Much of our evidence indicates that the negative effects on education were driven by the transitional period and discrimination in school. It is possible that cohorts facing a new institutional status quo absent these sources of differential treatment would not have been similarly negatively affected. At the same time, there is no indication of any positive effects of the law, at least in terms of educational outcomes, for younger cohorts in our sample.<sup>27</sup>

It is also worth emphasizing that generational effects of the ban are not easy to assess with existing data. One of the potential impacts of veiling bans highlighted by Carvalho (2012) is their potential to increase religiosity and minority identification

---

<sup>26</sup>Meyersson (2014) provides an interesting test of a similar hypothesis in the reverse setup. In Turkey, female educational outcomes improved in municipalities with higher Islamic representation in the local government, consistent with the interpretation that an education more aligned with religious norms may increase school investment of both parents and schoolchildren.

<sup>27</sup>Consistent with this observation, Maurin and Navarette (2019) do not find any differential effect of the law on cohorts aged 13 or younger in 2004.

among younger generations. To what extent policies like the headscarf ban affect the incentives of second-generation immigrants to acculturate their children, and the implications this may have for minority identity in the long-run are important questions that remain unanswered. We leave such questions to future research.

## References

- Adida, Claire, David Laitin, and Marie-Anne Valfort. 2010. "Identifying Barriers to Muslim Integration in France". *Proceedings of the National Academy of Sciences* 107 (52): 22384–22390.
- . 2014. "Muslims in France: Identifying a Discriminatory Equilibrium". *Journal of Population Economics* 27 (4): 1039–1086.
- Appignanesi, Lisa, and Sara Maitland. 1989. *The Rushdie File*. Syracuse University Press.
- Aydin, Nilufer, Peter Fischer, and Dieter Frey. 2010. "Turning to God in the Face of Ostracism: Effects of Social Exclusion on Religiousness". *Personality and Social Psychology Bulletin* 36 (6): 742–753.
- Banks, Kira Hudson, Laura Kohn-Wood, and Michael Spencer. 2006. "An Examination of the African American Experience of Everyday Discrimination and Symptoms of Psychological Distress". *Community Mental Health Journal* 42 (6): 555–570.
- Bansak, Kirk, Jens Hainmueller, and Dominik Hangartner. 2016. "How Economic, Humanitarian, and Religious Concerns Shape European Attitudes toward Asylum Seekers". *Science* 354 (6309): 217–222.
- Beaman, Jean. 2015. "Boundaries of Frenchness: Cultural Citizenship and France's Middle-Class North African Second-Generation". *Identities* 22 (1): 36–52.
- . 2016. "As French as Anyone Else: Islam and the North African Second Generation in France". *International Migration Review* 50 (1): 41–69.
- Bergman, Lars, and David Magnusson. 1997. "A Person-Oriented Approach in Research on Developmental Psychopathology". *Development and Psychopathology* 9 (2): 291–319.
- Bisin, Alberto, et al. 2008. "Are Muslim Immigrants Different in Terms of Cultural Integration?" *Journal of the European Economic Association* 6 (2-3): 445–456.



- . 2011. “Formation and Persistence of Oppositional Identities”. *European Economic Review* 55 (8): 1046–1071.
- Blaydes, Lisa, and Drew Linzer. 2008. “The Political Economy of Women’s Support for Fundamentalist Islam”. *World Politics* 60 (4): 576–609.
- Bloemraad, Irene, and Matthew Wright. 2014. ““Utter Failure” or Unity out of Diversity? Debating and Evaluating Policies of Multiculturalism”. *International Migration Review* 48 (s1).
- Bowen, John. 2007. *Why the French Don’t Like Headscarves: Islam, the State, and Public Space*. Princeton: Princeton University Press.
- Branscombe, Nyla, Michael Schmitt, and Richard Harvey. 1999. “Perceiving Pervasive Discrimination among African Americans: Implications for Group Identification and Well-Being.” *Journal of Personality and Social Psychology* 77 (1): 135.
- Cairns, Robert, Beverley Cairns, and Holly Neckerman. 1989. “Early School Dropout: Configurations and Determinants”. *Child Development*: 1437–1452.
- Cameron, Colin, Jonah Gelbach, and Douglas Miller. 2008. “Bootstrap-Based Improvements for Inference with Clustered Errors”. *The Review of Economics and Statistics* 90 (3): 414–427.
- Cano, Miguel Angel, et al. 2016. “Associations of Ethnic Discrimination with Symptoms of Anxiety and Depression among Hispanic Emerging Adults: A Moderated Mediation Model”. *Anxiety, Stress, & Coping* 29 (6): 699–707.
- Carvalho, Jean-Paul. 2012. “Veiling”. *The Quarterly Journal of Economics* 128 (1): 337–370.
- Chavous, T. M., et al. 2008. “Gender Matters, Too: The Influences of Social Racial Discrimination and Racial Identity on Academic Engagement Outcomes among African American Adolescents”. *Developmental Psychology* 44:637–654.

- Chérifi, Hanifa. 2005. *Application de la loi du 15 mars 2004*. Ministère de l'Éducation Nationale de l'Enseignement Supérieur et de la Recherche. <https://www.vie-publique.fr/sites/default/files/rapport/pdf/064000177.pdf>.
- Coker, Tumaini, et al. 2009. "Perceived Racial/Ethnic Discrimination among Fifth-Grade Students and its Association with Mental Health". *American Journal of Public Health* 99 (5): 878–884.
- Conklin, Hokulea. 2011. *Perceived Racism and Mental Health: A Meta-Analytic Review*. Dissertation. Brigham Young University-Provo.
- Connor, Phillip. 2010. "Contexts of Immigrant Receptivity and Immigrant Religious Outcomes: The Case of Muslims in Western Europe". *Ethnic and Racial Studies* 33 (3): 376–403.
- Dana, Karam, et al. 2018. "Veiled Politics: Experiences with Discrimination among Muslim Americans". *Politics and Religion*: 1–49.
- Deltombe, Thomas. 2005. *L'Islam Imaginaire: La Construction Médiatique de l'Islamophobie en France*. La Découverte.
- Duguet, Emmanuel, et al. 2010. "Are Young French Jobseekers of Ethnic Immigrant Origin Discriminated Against? A Controlled Experiment in the Paris Area." *Annals of Economics and Statistics* 99 (100): 187–215.
- Emeriau, Mathilde, and David Laitin. 2018. *Integration Failures: A Search for Mechanisms*. Unpublished manuscript. <https://mathildeemeriau.com/publication/integrationfailures/>.
- European Commission. 2017. *Religious Clothing and Symbols in Employment: A Legal Analysis of the Situation in the EU Member States*. Tech. rep. [https://ec.europa.eu/newsroom/just/item-detail.cfm?item\\_id=608849](https://ec.europa.eu/newsroom/just/item-detail.cfm?item_id=608849).
- Fleischmann, Fenella, and Karen Phalet. 2018. "Religion and National Identification in Europe: Comparing Muslim Youth in Belgium, England, Germany, the Netherlands, and Sweden". *Journal of Cross-Cultural Psychology* 49 (1): 44–61.

- Fouka, Vasiliki. 2019. "How Do Immigrants Respond to Discrimination? The Case of Germans in the US During World War I". *American Political Science Review* 113 (2): 405–422.
- . Forthcoming. "Backlash: The Unintended Effects of Language Prohibition in U.S. Schools after World War I". *Review of Economic Studies*.
- Ghaffari, Azadeh, and Ciftci Ghaffari. 2010. "Religiosity and Self-Esteem of Muslim Immigrants to the United States: The Moderating Role of Perceived Discrimination". *The International Journal for the Psychology of Religion* 20 (1): 14–25.
- Ghitza, Yair, Andrew Gelman, and Jonathan Auerbach. 2019. *The Great Society, Reagan's Revolution, and Generations of Presidential Voting*. Unpublished manuscript. Columbia University.
- Gomez, Angel, et al. 2011. "Rejected and Excluded Forevermore, but Even More Devoted: Irrevocable Ostracism Intensifies Loyalty to the Group Among Identity-Fused Persons". *Personality and Social Psychology Bulletin* 37 (12): 1574–1586.
- Gould, Eric, and Esteban Klor. 2015. "The Long-run Effect of 9/11: Terrorism, Backlash, and the Assimilation of Muslim Immigrants in the West". *The Economic Journal* 126 (597): 2064–2114.
- Haddad, Yvonne Yazbeck. 2007. "The Post-9/11 Hijab as Icon". *Sociology of Religion* 68, no. 3 (): 253–267.
- Harder, Niklas, et al. 2018. "Multidimensional Measure of Immigrant Integration". *Proceedings of the National Academy of Sciences* 115 (45): 11483–11488.
- Institut Montaigne. 2016. *A French Islam is Possible*. Tech. rep. <https://www.institutmontaigne.org/ressources/pdfs/publications/a-french-islam-is-possible-report.pdf>.
- IPUMS. 2018. *Integrated Public Use Microdata Series, International: Version 7.0 [dataset]*. Minneapolis, MN: Minnesota Population Center. <http://doi.org/10.18128/D020.V70>.

- Jalalzai, Farida. 2011. "Anxious and Active: Muslim Perception of Discrimination and Treatment and its Political Consequences in the Post-September 11, 2001 United States". *Politics and Religion* 4 (1): 71–107.
- Joppke, Christian. 2007. "Beyond National Models: Civic Integration Policies for Immigrants in Western Europe". *West European Politics* 30 (1): 1–22.
- Kabir, N.A. 2012. *Young British Muslims: Identity, Culture, Politics and the Media*. Edinburgh University Press.
- Kepel, Gilles. 2012. *Banlieue de la République: Société, Politique et Religion à Clichy-sousBois et Montermeil*. Paris: Gallimard.
- King, Eden, and Afra Ahmad. 2010. "An Experimental Field Study of Interpersonal Discrimination toward Muslim Job Applicants". *Personnel Psychology* 63 (4): 881–906.
- Krosnick, Jon, and Duane Alwin. 1989. "Aging and Susceptibility to Attitude Change". *Journal of Personality and Social Psychology* 57 (3): 416.
- Kunst, Jonas, et al. 2012. "Coping with Islamophobia: The Effects of Religious Stigma on Muslim Minorities' Identity Formation". *International Journal of Intercultural Relations* 36 (4): 518 –532. ISSN: 0147-1767.
- Laurence, Jonathan, and Justin Vaisse. 2006. *Integrating Islam: Political and Religious Challenges in Contemporary France*. Washington, D.C.: Brookings Institute Press.
- Levy, D. J., et al. 2016. "Psychological and Biological Responses to Race-Based Social Stress as Pathways to Disparities in Educational Outcomes". *American Psychologist* 71 (6): 455–473.
- Lorcerie, Françoise. 2012. "Y a-t-il des Élèves Musulmans?" *Diversité : Ville École Intégration*: 64–73.
- Mattei, Paola, and A Aguilar. 2016. *Secular Institutions, Islam and Education Policy: France and the US in Comparative Perspective*. Springer.

- Maurin, Eric, and Nicolas Navarrete. 2019. *Behind the Veil: The Effect of Banning the Islamic Veil in Schools*. Tech. rep. [https://www.parisschoolofeconomics.eu/docs/maurin-eric/maurin\\_navarrete\\_dp12645.pdf](https://www.parisschoolofeconomics.eu/docs/maurin-eric/maurin_navarrete_dp12645.pdf).
- Maxwell, Rahsaan, and Erik Bleich. 2014. “What Makes Muslims Feel French?” *Social Forces* 93 (1): 155–179.
- Meyersson, Erik. 2014. “Islamic Rule and the Empowerment of the Poor and Pious”. *Econometrica* 82 (1): 229–269.
- Nagra, Baljit. 2011. “‘Our Faith Was Also Hijacked by Those People’: Reclaiming Muslim Identity in Canada in a Post-9/11 Era”. *Journal of Ethnic and Migration Studies* 37 (3): 425–441.
- Noh, Samuel, and Violet Kaspar. 2003. “Perceived Discrimination and Depression: Moderating Effects of Coping, Acculturation, and Ethnic Support”. *American Journal of Public Health* 93 (2): 232–238.
- Open Society Foundations. 2018. *Restrictions on Muslim Women’s Dress in the 28 EU Member States: Current Law, Recent Legal Developments, and the State of Play*. Tech. rep. <https://www.opensocietyfoundations.org/reports/restrictions-muslim-women-s-dress-28-eu-member-states>.
- Open Society Institute. 2007. *Muslims in the EU: Cities Report*. Tech. rep. <https://www.opensocietyfoundations.org/reports/muslims-europe-report-11-eu-cities>.
- Oskooii, Kassra. 2016. “How Discrimination Impacts Sociopolitical Behavior: A Multi-dimensional Perspective”. *Political Psychology* 37 (5): 613–640.
- . 2018. “Perceived Discrimination and Political Behavior”. *British Journal of Political Science*: 1–26.
- Padela, Aasim, and Michele Heisler. 2010. “The Association of Perceived Abuse and Discrimination after September 11, 2001, With Psychological Distress, Level of Hap-

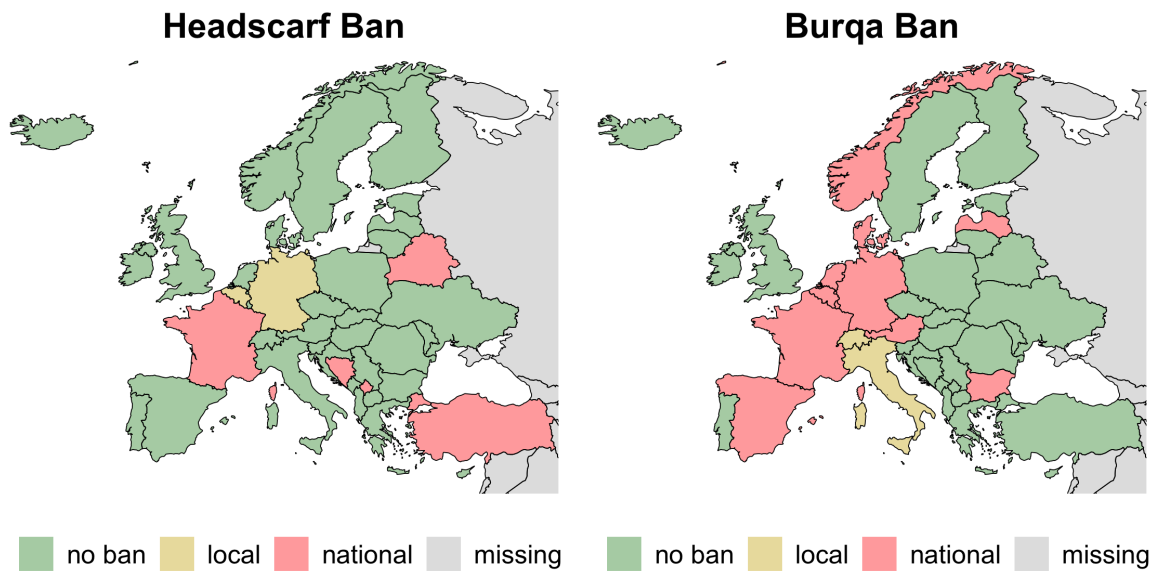
- piness, and Health Status Among Arab Americans”. *American Journal of Public Health* 100 (2): 284–291.
- Park, Jaihyun, et al. 2009. “Subtle Bias Against Muslim Job Applicants in Personnel Decisions”. *Journal of Applied Social Psychology* 39 (9): 2174–2190.
- Patel, David. 2012. “Concealing to Reveal: The Informational Role of Islamic Dress”. *Rationality and Society* 24 (3): 295–323.
- Paul, Silverstine. 2004. “Headscarves and the French Tricolor”. *Middle Eastern Research Online*.
- Peek, Lori. 2005. “Becoming Muslim: The Development of a Religious Identity”. *Sociology of Religion* 66 (3): 215–242.
- Pierné, Guillaume. 2013. “Hiring Discrimination Based on National Origin and Religious Closeness: Results from a Field Experiment in the Paris Area”. *IZA Journal of Labor Economics* 2 (1): 4.
- Piscatoi, James. 1990. “The Rusdhi Affair and the Politics of Ambiguity”. *Journal of International Affairs* 66:767–789.
- Portes, Alejandro, and Rubén Rumbaut. 2001. *Legacies: The Story of the Immigrant Second Generation*. University of California Press.
- Rumbaut, Rubén. 2005. “Sites of Belonging: Acculturation, Discrimination, and Ethnic Identity among Children of Immigrants”. In *Discovering successful pathways in children’s development: Mixed methods in the study of childhood and family life*, ed. by Thomas S. Weiner, 111–164. University of Chicago Press.
- . 2008. “Reaping what you Sow: Immigration, Youth, and Reactive Ethnicity”. *Applied Development Science* 12 (2): 108–111.
- Schildkraut, Deborah. 2005. “The Rise and Fall of Political Engagement among Latinos: The Role of Identity and Perceptions of Discrimination”. *Political Behavior* 27 (3): 285–312.

- Scott, Joan Wallach. 2009. *The Politics of the Veil*. Princeton: Princeton University Press.
- Sniderman, Paul, Louk Hagendoorn, and Markus Prior. 2004. "Predisposing Factors and Situational Triggers: Exclusionary Reactions to Immigrant Minorities". *American Political Science Review* 98 (01): 35–49.
- Soper, Christopher, and Joel Fetzer. 2003. "Explaining the Accommodation of Muslim Religious Practices in France, Britain, and Germany". *French Politics* 1 (1): 39–59.
- Stasi Report. 2004. *Report to the President of the Republic, Commission of Reflection on the Application of the Principle of Laicism in the Republic*. Tech. rep. <https://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/034000725.pdf>.
- Steele, Claude, and Joshua Aronson. 1995. "Stereotype Threat and the Intellectual Test Performance of African Americans". *Journal of Personality and Social Psychology* 69 (5): 797.
- Turner, John, and Henri Tajfel. 1986. "The Social Identity Theory of Intergroup Behavior". *Psychology of Intergroup Relations* 5:7–24.
- Umaña-Taylor, Adriana, and Kimberly Updegraff. 2007. "Latino Adolescents' Mental Health: Exploring the Interrelations among Discrimination, Ethnic Identity, Cultural Orientation, Self-Esteem, and Depressive Symptoms". *Journal of Adolescence* 30 (4): 549–567.
- Valfort, Marie-Anne. 2018. *Identifying Barriers to Muslim Integration in France*. Working paper. Science Po.
- Verkuyten, Maykel, and Ali Aslan Yildiz. 2007. "National (Dis)identification and Ethnic and Religious Identity: A Study Among Turkish-Dutch Muslims". *Personality and Social Psychology Bulletin* 33 (10): 1448–1462.
- Voas, David, and Fenella Fleischmann. 2012. "Islam Moves West: Religious Change in the First and Second Generations". *Annual Review of Sociology* 38 (1): 525–545.

- Westfall, Aubrey, et al. 2017. "Islamic Headcovering and Political Engagement: The Power of Social Networks". *Politics and Religion* 10 (1): 3–30.
- Williams, Kipling, and Kristin Sommer. 1997. "Social Ostracism by Coworkers: Does Rejection Lead to Loafing or Compensation?" *Personality and Social Psychology Bulletin* 23 (7): 693–706.
- Winter, Bronwyn. 2009. *Hijab and the Republic: Uncovering the French Headscarf Debate*. Gender and Globalization. Syracuse University Press.
- Wright, Matthew, and Irene Bloemraad. 2012. "Is there a Trade-off Between Multiculturalism and Socio-political Integration? Policy Regimes and Immigrant Incorporation in Comparative Perspective". *Perspectives on Politics* 10 (1): 77–95.
- Yazdiha, Hajar. 2019. "Exclusion through Acculturation? Comparing First-and Second-Generation European Muslims' Perceptions of Discrimination across Four National Contexts". *Ethnic and Racial Studies* 42 (5): 782–800.
- Ysseldyk, Renate, Kimberly Matheson, and Hymie Anisman. 2010. "Religiosity as Identity: Toward an Understanding of Religion From a Social Identity Perspective". *Personality and Social Psychology Review* 14 (1): 60–71.

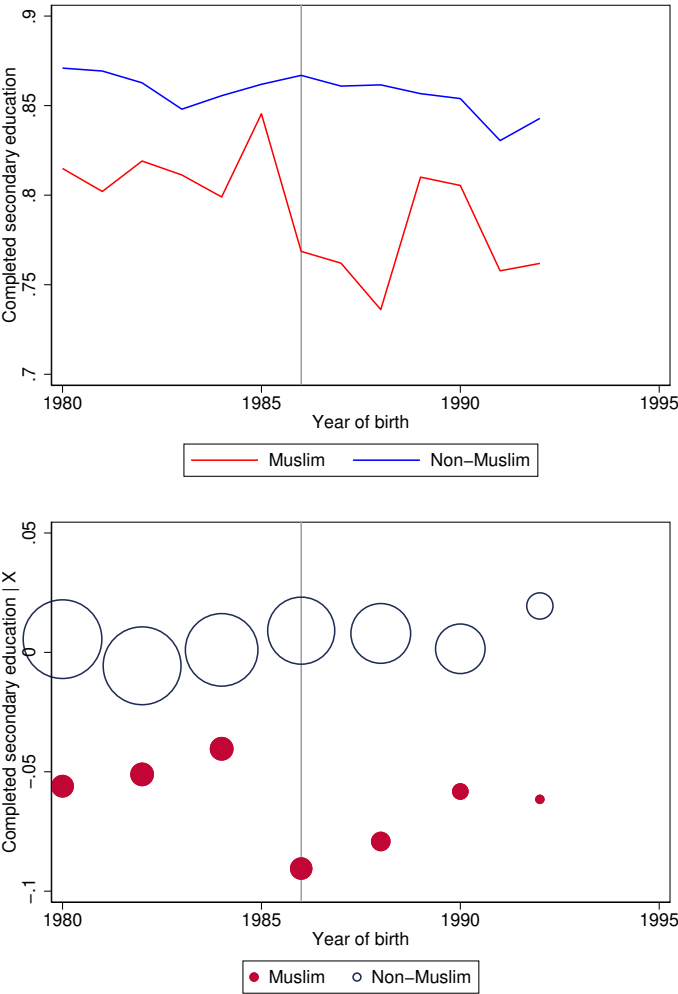


Figure 1. Prevalence of laws regulating veiling across Europe



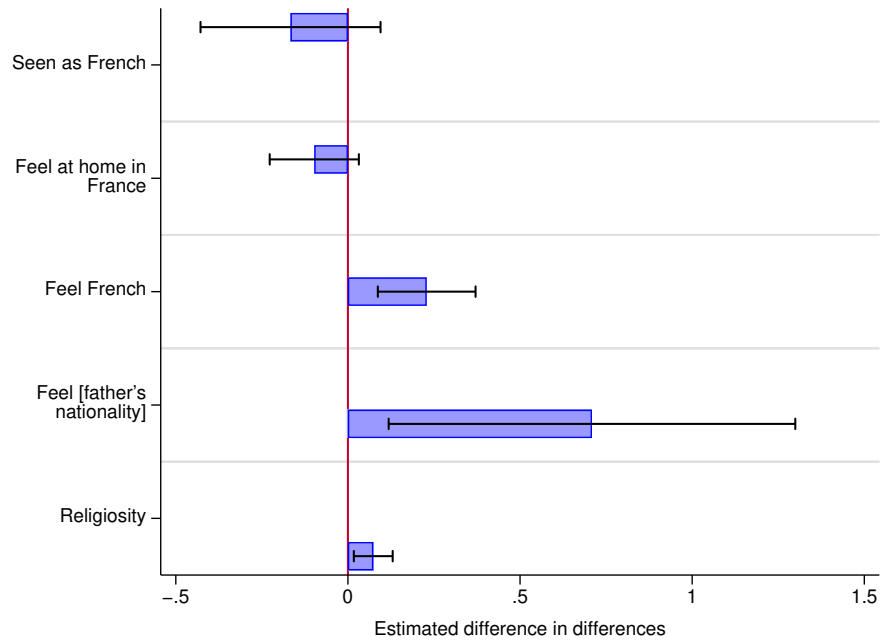
The figures describe the status of veiling laws. The left panel illustrates the prevalence of headscarf laws. The right panel maps the prevalence of full-face veil (burqa or niqab) laws. Such laws include bans implemented in all public spaces or specific contexts such as schools or courts. “Local” and “national” refer to the level of government that implements the law. Data is from European Commission (2017) and Open Society Foundations (2018).

Figure 2. Rates of secondary education completion by birth cohort for French-born women



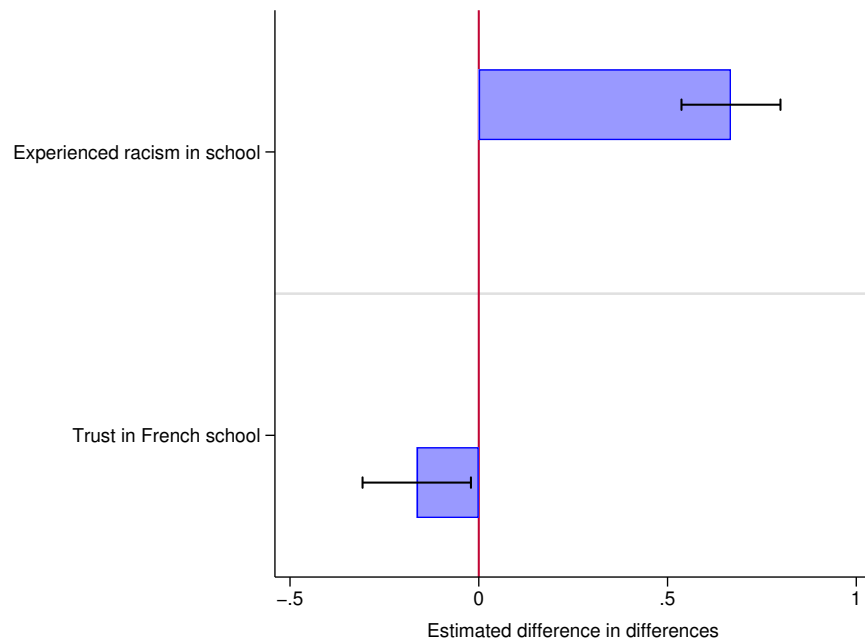
The upper panel plots the raw proportions of Muslim and non-Muslim women who completed secondary education for each birth cohort. The lower panel plots residuals, aggregated over two-year cohorts, from a regression of an indicator for completed secondary education on age and survey year fixed effects. The vertical line corresponds to 1986, the first birth cohort impacted by the ban. The sample consists of French-born women born 1980 or later and who were at least 20 years old at survey year. Circle size is proportional to sample size.

Figure 3. Effects on self-reported measures of identity



The figure plots coefficient estimates and 90% confidence intervals from the interaction between Muslim religion and an indicator for individuals born after 1985. The regression controls for birth cohort and religion fixed effects, as well as for a linear Muslim-specific age trend. The sample consists of French-born women born 1980 or later. For all outcomes but religiosity the sample is restricted to women with foreign-born parents. Outcomes are standardized and estimated effects can be interpreted in terms of standard deviations.

Figure 4. Experiences in and views of French school



The figure plots coefficient estimates and 90% confidence intervals from the interaction between Muslim religion and an indicator for individuals born after 1985. The regression controls for birth cohort and religion fixed effects, as well as for a linear Muslim-specific age trend. The sample consists of French-born women born 1980 or later. Outcomes are standardized and estimated effects can be interpreted in terms of standard deviations.

Table 1. Effect on secondary education completion rates

Dep. Variable	(1)	(2)	(3)	(4)	(5)
	Completed secondary education				
Muslim × Born after 1985	-0.0295*** (0.00776)	-0.0291*** (0.00771)	-0.0386*** (0.00343)	-0.0712*** (0.00805)	
Muslim father only × Born after 1985					-0.0233*** (0.00298)
Muslim father and mother × Born after 1985					-0.0488*** (0.00776)
Observations	45265	45265	45265	45265	45265
R-squared	0.00456	0.00548	0.00985	0.00994	0.0117
Birth year FE	✓	✓	✓	✓	✓
Father's birthplace FE	✓	✓	✓	✓	✓
Survey year FE		✓	✓	✓	✓
Age × Father's birthplace FE			✓	✓	✓
Muslim-specific linear trend				✓	

**Notes:** The sample consists of French-born women born 1980 or later and who were at least 20 years old at survey year. Standard errors are clustered at the father's birthplace level. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

Table 2. Effect on long-term outcomes

Dep. Variable	Out of labor force (1)	Employed (2)	Lives with parents (3)	Has children (4)	Married (5)
Muslim $\times$ Born after 1985	0.0288** (0.00875)	-0.0370*** (0.00461)	0.0242** (0.00655)	0.0398*** (0.00993)	-0.00912** (0.00285)
Observations	45289	45289	45289	9836	45286
R-squared	0.183	0.174	0.244	0.0347	0.132

**Notes:** The sample consists of French-born women born 1980 or later and who were at least 20 years old at survey year. All regressions include birth year, father's birthplace and survey year fixed effects, as well as father's birthplace by age fixed effects. Standard errors are clustered at the father's birthplace level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table 3. Experiences of racism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	School	Work	University	Store	Street	Public transport	Police	Hospital	Bank	Public services	Other context
Muslim $\times$ Born after 1985	0.668*** (0.0730)	-0.251* (0.136)	-0.152 (0.239)	-0.0340 (0.177)	-0.309* (0.156)	0.0200 (0.139)	0.0571 (0.0362)	0.0183 (0.202)	0.0912 (0.0895)	-0.0361 (0.136)	-0.0711 (0.0862)
Observations	930	930	930	930	930	930	930	930	930	930	2608
R-squared	0.0486	0.0751	0.0166	0.0291	0.0330	0.0349	0.0182	0.0217	0.172	0.0204	0.0157

**Notes:** The sample consists of French-born women born 1980 or later. Outcomes are standardized and estimated differences can be interpreted in terms of standard deviations. All regressions include birth year and religion fixed effects, as well as a linear Muslim-specific trend. Standard errors are clustered at the religion level. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

Table 4. Heterogeneous effects

Dep. Variable	(1)	(2)	(3)
		Completed secondary education	
Muslim $\times$ Born after 1985	0.0300 (0.0654)	-0.0260 (0.0645)	-0.188 (0.107)
Muslim $\times$ Born after 1985 $\times$ Predicted devoutness	-0.0924 (0.0546)		
Muslim $\times$ Born after 1985 $\times$ Predicted psychological assimilation		0.171 (0.104)	
Muslim $\times$ Born after 1985 $\times$ Predicted language assimilation			0.127 (0.129)
Observations	1953	1944	1930
R-squared	0.0478	0.0477	0.0622

**Notes:** The sample consists of French-born women born 1980 or later and aged 20 or older at survey year. All regressions include birth year and religion fixed effects, as well as a linear Muslim-specific trend. Standard errors are clustered at the religion level. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.



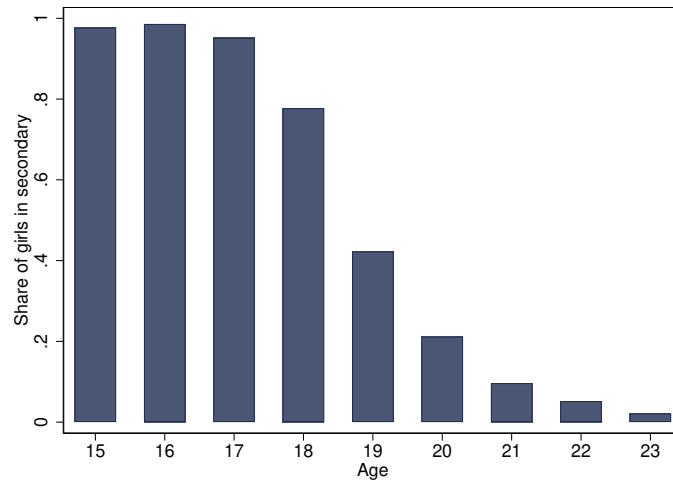
# Appendix (Not for publication)

## Table of Contents

<b>A</b>	<b>Additional Figures and Tables</b>	<b>2</b>
<b>B</b>	<b>Robustness checks and additional analyses</b>	<b>7</b>
B.1	Ruling out alternative explanations for effects on educational attainment . . . . .	7
B.2	Effects on bac completion rates . . . . .	13
B.3	Pathways for effects on educational outcomes . . . . .	15
B.4	Replicating LFS results using census microdata . . . . .	20
B.5	Effects of the 1994 circular . . . . .	24
<b>C</b>	<b>Data Appendix</b>	<b>29</b>
C.1	Variable description . . . . .	29
C.2	Summary statistics . . . . .	32
C.3	Predictors of religiosity and assimilation in TeO data . . . . .	34
<b>D</b>	<b>Interview protocol</b>	<b>35</b>
D.1	Objectives . . . . .	35
D.2	Sampling . . . . .	35
D.3	Mode of data collection . . . . .	36
D.4	Analyzing interviews . . . . .	37
D.5	Interview questions . . . . .	37

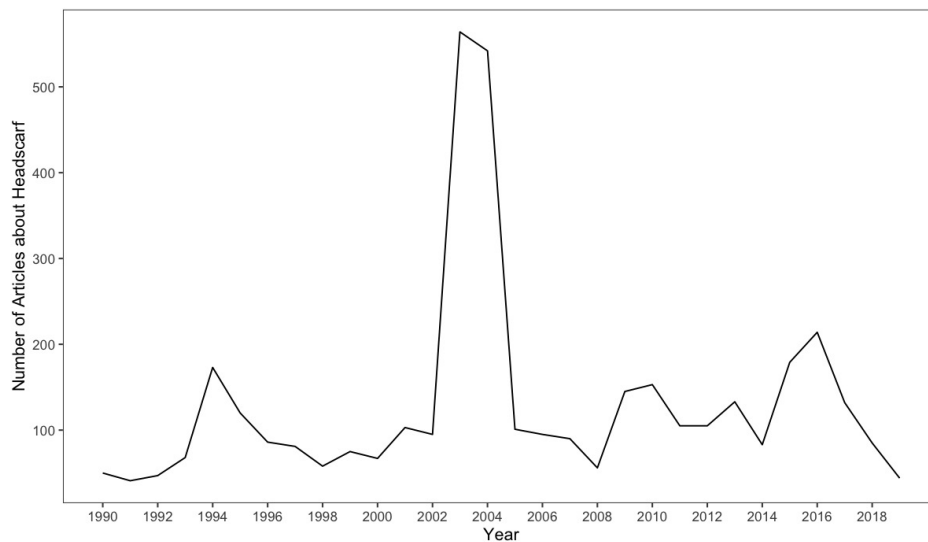
## A Additional Figures and Tables

Figure A.1. Share of girls enrolled in secondary education by age



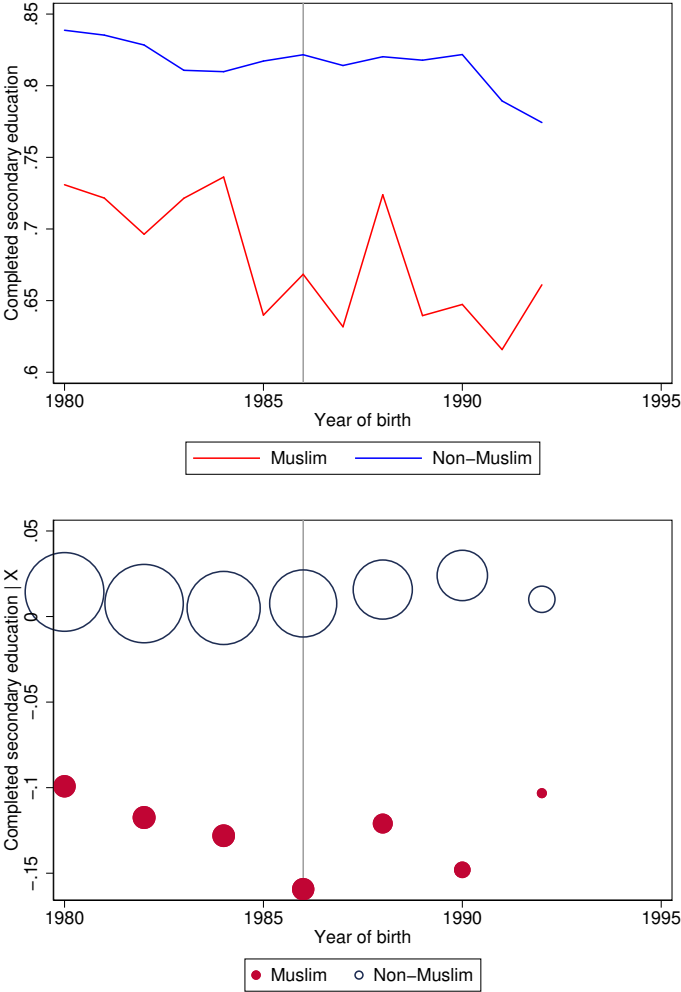
Data is from the 2003 wave of the LFS. The sample consists of French-born women.

Figure A.2. Annual number of articles about the headscarf



The figure plots the annual number of articles containing any of the terms ‘hijab’, ‘voile’ or ‘foulard’ together with any of the terms ‘musulman’, ‘musulmane’ or ‘islam’ between 1990 and 2019 in the daily newspaper Le Monde. Source: LexisNexis.

Figure A.3. Rates of secondary education completion by birth cohort for French-born men



The upper panel plots the raw proportions of Muslim and non-Muslim men who completed secondary education for each birth cohort. The lower panel plots residuals, aggregated over two-year cohorts, from a regression of an indicator for completed secondary education on age and survey year fixed effects. The vertical line corresponds to 1986, the first birth cohort impacted by the ban. The sample consists of French-born men born 1980 or later and who were at least 20 years old at survey year. Circle size is proportional to sample size.

Table A.1. Self-reported measures of identity

Dep. Variable	(1) Seen as French	(2) Feel at home in France	(3) Feel French	(4) Feel [father's nationality]	(5) Religiosity
Muslim × Born after 1985	-0.167 (0.147)	-0.0977 (0.0727)	0.229** (0.0796)	0.709* (0.318)	0.0735** (0.0319)
Observations	1407	1455	1454	200	2604
R-squared	0.0890	0.0401	0.0525	0.146	0.365

**Notes:** The sample consists of French-born women born 1980 or later. Outcomes are standardized and estimated effects can be interpreted in terms of standard deviations. All regressions include birth year and religion fixed effects, as well as a linear Muslim-specific trend. Standard errors are clustered at the religion level. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

Table A.2. Experiences in and views of French school

Dep. Variable	(1)	(2)
	Experienced racism	Trust in French school
Muslim $\times$ Born after 1985	0.668*** (0.0730)	-0.164* (0.0811)
Observations	930	2594
R-squared	0.0486	0.0113

**Notes:** The sample consists of French-born women born 1980 or later. Outcomes are standardized and estimated effects can be interpreted in terms of standard deviations. All regressions include birth year and religion fixed effects, as well as a linear Muslim-specific trend. Standard errors are clustered at the religion level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A.3. Effects on health-related outcomes

	(1)	(2)	(3)	(4)	(5)
	Subjective health	Health bad or very bad	Health problem: life, school-age	Health problem: existing condition	Health problem: work
Muslim $\times$ Born after 1985	-0.0408 (0.0578)	0.0250*** (0.00616)	0.140*** (0.0241)	-0.00840 (0.0354)	0.107 (0.0705)
Observations	2608	2608	598	595	596
R-squared	0.0199	0.00711	0.0530	0.0378	0.0663

**Notes:** The sample consists of French-born women born 1980 or later. All regressions include birth year and religion fixed effects, as well as a linear Muslim-specific trend. Standard errors are clustered at the religion level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A.4. Effect on secondary education completion rates, men

Dep. Variable	(1)	(2)	(3)	(4)
	Completed secondary education			
Muslim $\times$ Born after 1985	-0.0257* (0.0120)	-0.0255* (0.0123)	0.0125 (0.0151)	0.00528 (0.0219)
Observations	43986	43986	43984	43984
R-squared	0.0132	0.0145	0.0198	0.0198
Birth year FE	✓	✓	✓	✓
Father's birthplace FE	✓	✓	✓	✓
Survey year FE		✓	✓	✓
Age $\times$ Father's birthplace FE			✓	✓
Muslim-specific linear trend				✓

**Notes:** The sample consists of French-born men born 1980 or later and who were at least 20 years old at survey year. Standard errors are clustered at the father's birthplace level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A.5. Change in student status between spring and fall quarter, men

Dep. Variable	(1)	(2)	(3)	(4)	(5)
	Change in student status				
Muslim $\times$ 2004 or later	-0.00333 (0.0343)	-0.00932 (0.0329)	-0.00774 (0.0332)	-0.0142 (0.0471)	0.0315 (0.0303)
Observations	8462	8462	8462	8462	1479
R-squared	0.00453	0.0943	0.0974	0.104	0.160
Survey year FE	✓	✓	✓	✓	✓
Father's birthplace FE	✓	✓	✓	✓	✓
Age FE		✓	✓	✓	✓
Birth year FE			✓	✓	✓
Age $\times$ Father's birthplace FE				✓	✓
Sample 2003-2004					✓

**Notes:** The dependent variable is student status in quarter 4, difference from quarter 2. The sample is restricted to French-born men older than 16, who were in secondary education 2 quarters before. Data is from the 2003–2012 LFS. Standard errors clustered at the parent's nationality level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A.6. Heterogeneous effects, identity and religiosity

	(1)	(2)	(3)	(4)	(5)	(6)
		Feel French			Religiosity	
Muslim $\times$ Born after 1985	0.119 (0.0691)	0.409** (0.145)	-0.566 (0.529)	0.00743 (0.0612)	0.214*** (0.0684)	0.394** (0.163)
Muslim $\times$ Born after 1985 $\times$ Predicted devoutness	-0.526*** (0.0940)			0.154* (0.0792)		
Muslim $\times$ Born after 1985 $\times$ Predicted psychological assimilation		0.490** (0.218)			-0.101 (0.0804)	
Muslim $\times$ Born after 1985 $\times$ Predicted language assimilation			0.887 (0.736)			-0.442** (0.184)
Observations	1435	1424	1406	2563	2547	2528
R-squared	0.0628	0.0697	0.113	0.388	0.385	0.393

**Notes:** The sample consists of French-born women born 1980 or later. Outcomes are standardized and estimated differences can be interpreted in terms of standard deviations. All regressions include birth year and religion fixed effects, as well as a linear Muslim-specific trend. Standard errors are clustered at the religion level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## B Robustness checks and additional analyses

### B.1 Ruling out alternative explanations for effects on educational attainment

We perform a wide set of checks to verify the validity of the estimated effect of the ban on the likelihood of completing secondary school. Figure B.1 replicates the lower panel of Figure 2 for a set of different comparisons that constitute plausible placebo checks. If the estimated effect is resulting from a general increase in xenophobia, potentially targeting women more directly, we should observe a similar drop in the educational attainment of cohorts born 1986 or later for all immigrant groups. This is not what we find. In Figure B.1 we define as treated two groups of second-generation immigrant women that should not have been affected by the ban: Southern Europeans (the largest group of second generation immigrants in France after those from the Maghreb) and those born in Laos, Vietnam or Cambodia. Despite smaller sample sizes, there is no pattern that mirrors that for Muslim women and that would indicate that confounding factors are affecting the educational profiles of younger cohorts of second generation immigrants in general.

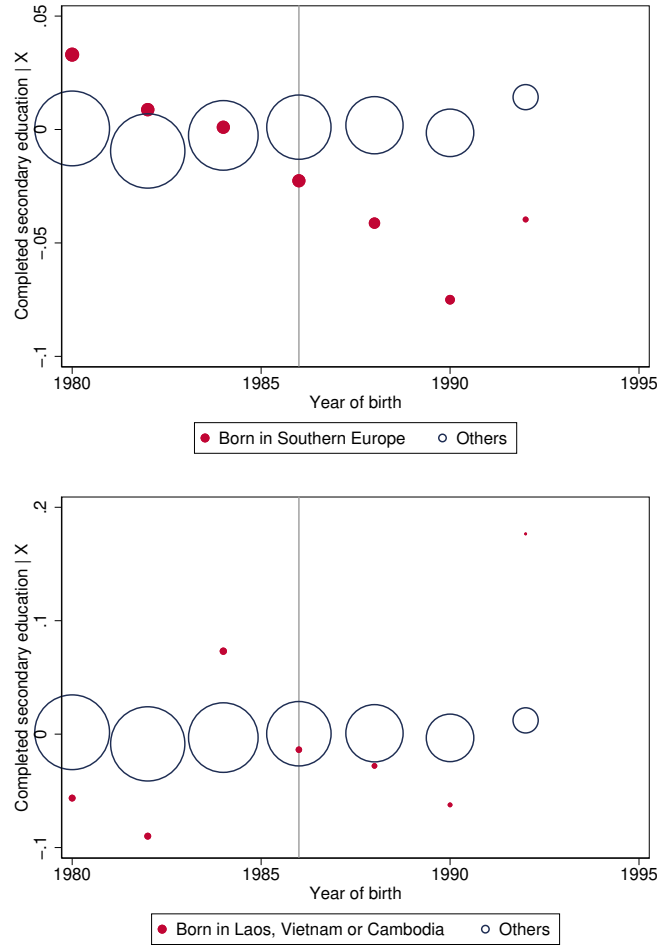
To address any concerns that the drop in completed secondary education for younger cohorts reflects discrimination spurred by 9/11, we run additional placebo regressions. Table B.1 reports the interaction coefficient of our preferred specification (the one reported in Column (3) of Table 1) when using each cohort in our sample as an alternative cutoff for treatment. Only 1986 corresponds to a large and significant negative effect on educational attainment. Importantly, almost all coefficients for cohorts born before 1986 are near zero, indicating that our findings are not merely the continuation of a trend that started in 2001.

Our difference-in-differences design does not require that Muslims and non-Muslims are balanced in terms of their characteristics in order to deliver estimates of causal





Figure B.1. Placebo results for non-Muslim second generation immigrant women



The figure plots residuals, aggregated over two-year cohorts, from a regression of an indicator for completed secondary education on age and survey year fixed effects. The sample consists of French-born women born 1980 or later and who were at least 20 years old at survey year. Circle size is proportional to sample size.

effects. The validity of the design only requires that any difference between the two groups would have remained constant in the absence of the headscarf ban. Figure 2 and the robustness of our results to controlling for pre-trends and alternative cutoffs indicate the absence of differential pre-trends in secondary educational attainment between Muslims and non-Muslims. Nonetheless, to further ensure that any differential effect is not driven by a time-varying change in other characteristics of the sample, we combine difference-in-differences with a balancing exercise in the spirit of Ladd and Lenz (2009). We use entropy balancing (Hainmueller 2012) to balance Muslims and non-Muslims in terms of pre-treatment covariates. The method generates a set of weights, that, when

applied to the original sample, balance selected moments of the treatment and control group. We match the means of the following pre-treatment characteristics available in the LFS: a full set of age indicators, a set of indicators for different categories of urbanization, and an indicator for individuals living in *sensitive urban zones* (Zones urbaines sensibles, ZUS), urban areas with high unemployment, a low percentage of high school graduates and a high percentage of public housing, which are specifically targets for state policy in France. Table B.2 presents characteristics of the balanced and unbalanced samples, and Table B.3 replicates our main results after applying entropy balance weights. Both the size and the significance of the coefficients remain largely unaffected.

Table B.2. Covariate balance before and after applying entropy balance weights

Variables	Muslim	Non-Muslim (unweighted)	Non-Muslim (weighted)
Age 21	0.102	0.120	0.102
Age 22	0.092	0.118	0.093
Age 23	0.098	0.112	0.098
Age 24	0.089	0.091	0.089
Age 25	0.097	0.076	0.097
Age 26	0.084	0.067	0.084
Age 27	0.075	0.058	0.075
Age 28	0.063	0.048	0.063
Age 29	0.047	0.040	0.047
Age 30	0.037	0.031	0.037
Age 31	0.023	0.022	0.023
Age 32	0.012	0.010	0.012
Rural	0.033	0.045	0.033
Less than 15,000 inhabitants	0.007	0.014	0.007
15,000 – 19,999 inhabitants	0.004	0.008	0.004
20,000 – 24,999 inhabitants	0.010	0.022	0.010
25,000 – 34,999 inhabitants	0.011	0.022	0.011
35,000 – 44,999 inhabitants	0.011	0.024	0.011
50,000 – 99,999 inhabitants	0.060	0.073	0.060
100,000 – 199,999 inhabitants	0.087	0.097	0.087
200,000 – 499,999 inhabitants	0.145	0.191	0.145
500,000 – 9,999,999 inhabitants	0.339	0.253	0.339
Paris	0.266	0.158	0.266
ZUS	0.225	0.061	0.225

**Notes:** The sample consists of French-born women born 1980 or later and who were at least 20 years old at survey year. “Muslim” refers to women whose father was born in the Maghreb or the Middle East.

Table B.3. Effect on secondary education completion rates, entropy balance weights

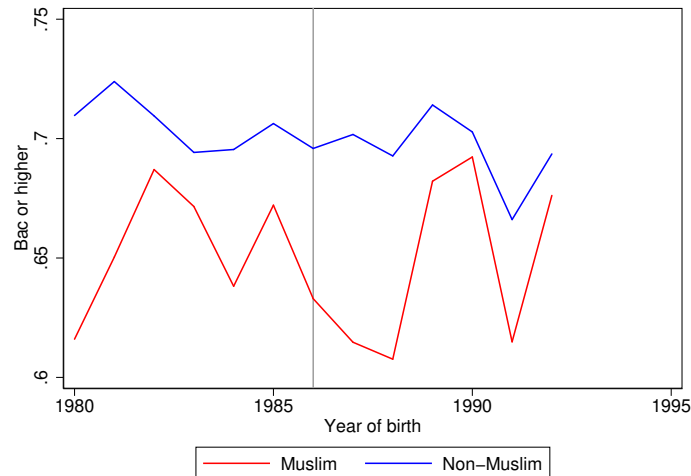
	(1)	(2)	(3)	(4)
Dep. Variable	Completed secondary education			
Muslim $\times$ Born after 1985	-0.0276** (0.00882)	-0.0280** (0.00832)	-0.0429*** (0.00209)	-0.0662*** (0.0111)
Observations	45255	45255	45255	45255
R-squared	0.0102	0.0115	0.0197	0.0199
Birth year FE	✓	✓	✓	✓
Father's birthplace FE	✓	✓	✓	✓
Survey year FE		✓	✓	✓
Age $\times$ Father's birthplace FE			✓	✓
Muslim-specific linear trend				✓

**Notes:** The sample consists of French-born women born 1980 or later and who were at least 20 years old at survey year. Entropy balance weights applied, matching the mean of a set of age indicators, eleven indicators for levels of urbanization and an indicator for residence in ZUS areas. Standard errors are clustered at the father's birthplace level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## B.2 Effects on bac completion rates

Figure B.2 plots trends in the raw data for completion rates of a professional or general baccalaureat. There appears to be a dip for cohorts born 1986-1988, but it is neither as clear-cut nor as large as the one for completion rates of vocational secondary. Table B.4 replicates Table 1 using as dependent variable an indicator for having at least a professional or general bac degree and it confirms the pattern in the graph. Effects on bac completion rates are negative, but attenuated compared to vocational secondary completion rates.

Figure B.2. Probability of having a bac or higher degree by birth cohort for French-born women



The graph plots the raw proportions of Muslim and non-Muslim women who obtained a professional or general bac for each birth cohort. The vertical line corresponds to 1986, the first birth cohort impacted by the ban. The sample consists of French-born women born 1980 or later and who were at least 20 years old at survey year.

These results suggest that the effects of the ban were particularly strong on the subset of Muslims who would not have continued to a longer cycle of professional or general secondary education. Since such students are likely less well integrated they may have felt more intensely the impact of the ban. This would be supported by our findings in Table 4 which suggest a more negative effect of the ban on less integrated women.

There are two additional likely explanations of these findings. First, some students

in vocational training were likely already working part-time and thus had an easier time dropping out of school and transitioning to the labor market. Second, it is less costly for students enrolled in vocational training to leave secondary education, than it is for those already invested in completing a longer technological or general cycle. These explanations are not necessarily mutually exclusive. Taken together, they confirm our general conclusion that the law's impact was stronger among less integrated subpopulations of Muslim women.

Table B.4. Effect on the probability of having a bac or higher degree

Dep. Variable	(1)	(2)	(3)	(4)
	Bac or higher			
Muslim $\times$ Born after 1985	0.00740 (0.00718)	0.00786 (0.00705)	-0.00649** (0.00258)	-0.0456*** (0.00205)
Observations	45265	45265	45265	45265
R-squared	0.00335	0.00430	0.00952	0.00960
Birth year FE	✓	✓	✓	✓
Father's birthplace FE	✓	✓	✓	✓
Survey year FE		✓	✓	✓
Age $\times$ Father's birthplace FE			✓	✓
Muslim-specific linear trend				✓

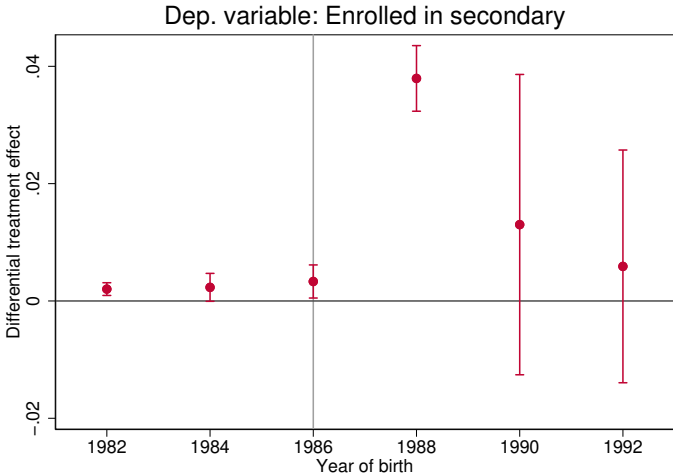
**Notes:** The sample consists of French-born women born 1980 or later and who were at least 20 years old at survey year. Standard errors are clustered at the father's birthplace level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

### B.3 Pathways for effects on educational outcomes

In this section we unpack several mechanisms that led cohorts affected by the ban to attain lower levels of secondary education.

Figure B.3 shows that Muslim women in affected cohorts are likely to require more time than their counterparts in the control group to complete secondary education. We plot the differential treatment effect of the ban, estimated from a flexible version of the specification in equation 1, which interacts Muslim origin with two-year birth cohort indicators. The dependent variable is the likelihood of being enrolled in secondary education, conditional on a full set of age by father’s birthplace fixed effects. The pattern suggests that cohorts born after 1985 are more likely to be students in high school at any given age. Conditional on differential age trends, Muslim women are on average somewhat more likely to stay in secondary education longer than non-Muslims, but this gap widens for affected cohorts.

Figure B.3. Likelihood of being a student in secondary education, conditional on age



The figure plots estimates of the interaction coefficient between Muslim origin and 2-year birth cohorts from a regression of an indicator for being in secondary school, that additionally controls for survey year and father’s birthplace by age fixed effects. Vertical lines denote 90% confidence intervals. The sample consists of French-born women born 1980 or later and who were at least 20 years old at survey year.

The increase in enrollment rates in secondary education conditional on age is substantial in magnitude. Muslim women’s enrollment rates increase by up to 4 percentage

points. Note that among 20 year old non-Muslims, only around 7.9% are still attending secondary education. For Muslims this share is 13.3% – a difference that is largely explained by the estimated effect of the veiling law.

Table B.5. Effects on educational outcomes, TeO

	(1)	(2)	(3)
	Completed secondary	Repeated a class	School choice due to parents' religion
Muslim $\times$ Born after 1985	-0.124*** (0.0161)	0.0555 (0.0373)	0.0104*** (0.00283)
Observations	1983	2592	2608
R-squared	0.0394	0.0241	0.0268

**Notes:** The sample consists of French-born women born 1980 or later. In Column 1, it is restricted to women aged 20 or older at survey time. All regressions include birth year and religion fixed effects, as well as a linear Muslim-specific trend. Standard errors are clustered at the religion level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

One reason for the drop in secondary educational attainment is that the ban led girls to repeat a class. This hypothesis – consistent with observations made in the official evaluations of the ban’s effects – could be because of time lost during the mediation period, switches from public to private education, or simply the pernicious effects of discrimination at school on girls’ effort and grades. To gain further insight, we complement our analysis with information from TeO. In column 1 of Table B.5 we first replicate our main finding in the TeO data. Conditional on birth year and religion fixed effects and a Muslim-specific linear trend, treated cohorts of Muslim women are approximately 12 pp. less likely to have completed secondary education, a point estimate close in magnitude to that estimate in the LFS. Given that we now rely on religion rather than country of origin to identify Muslim women, this finding lends validity to our main analysis with LFS data. We next turn to two variables: an indicator for having repeated a class in France, and an indicator for having chosen a school outside one’s neighborhood because it better suited the religious beliefs of one’s parents. Columns 2 and 3 of Table B.5 present the results. Treated women are 5 pp. more likely to have repeated a class and 1 pp. more likely to have had their school choice dictated by parents’ religious beliefs. The estimate on class repetition misses significance for conventional levels of confidence (p-value= 0.161), but, combined, the results confirm anecdotal accounts of the main



negative effects that the law and mediation period had on girls' school performance.

Additionally, we find evidence that Muslim girls drop out of school in direct response to the law's implementation. The panel nature of the French LFS allows us to examine how the student status of Muslim women changed after 2004. We restrict attention to women enrolled in secondary school in the spring quarter of each school year and who were older than 16 (and thus could have legally dropped out of school if they wanted to). We then compute a proxy for dropping out of school, as the difference in student status between spring quarter and fall quarter of the next school year. This variable takes on the value  $-1$  for individuals who were students in secondary education in the spring quarter, but are not students anymore (in any degree of education) in the fall of the same academic year.

We then compare the difference in student enrollment between fall and spring quarters of the same year for Muslims and non-Muslims before and after the ban.<sup>28</sup> We run a regression of the form:

$$\Delta Y_{isg} = \beta_1 + \beta_2 T_{sg} + g_g + s_s + \epsilon_{isg} \quad (2)$$

where  $i$  and  $g$  index individuals and groups, and  $s$  indexes survey years.  $T_{sg}$  is an indicator that equals one for Muslim individuals observed in a survey year when the law is already in place. The outcome of interest  $\Delta Y_{isg}$  is the change in student status (in secondary education) from the second to the fourth quarter of survey year  $s$ . We are interested in the coefficient  $\beta_2$ , the differential treatment effect on student enrollment for Muslim women.

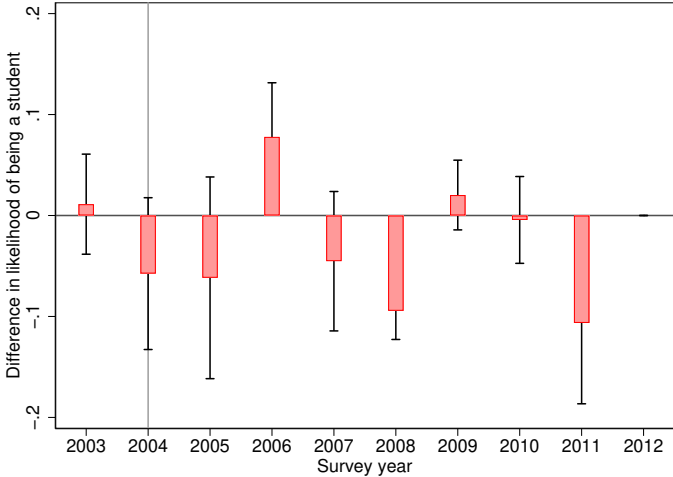
The results are plotted in Figure B.4 for all survey years in our sample. While we only have information on one calendar year before 2004 (the change between spring

---

<sup>28</sup>For years 2003-2004 we only have information on the nationality of the reference person of the household and not the father's birthplace. Throughout the panel analysis, we thus restrict attention to children of the reference person. Results are very similar when we impose the restriction that the reference person be male.

2003 and fall 2003), it is clear that this difference is zero and increases by around 6 percentage points in 2004–2005. With the exception of 2006 and 2009, all years after 2004 see an increased dropout rate for Muslim women compared to their non-Muslim counterparts.

Figure B.4. Change in student status between spring and fall quarter, difference Muslim women vs others



The figure plots estimates of the interaction coefficient between Muslim origin and survey year fixed effects from a regression of an indicator for changed student status between fall and spring quarter of the same school year, that also controls for survey year, birth cohort and parent’s birthplace by age fixed effects. Vertical lines denote 90% confidence intervals. The sample consists of French-born women aged 17 or above at survey year, who were enrolled in secondary education in the spring quarter of the previous year. Data is from the 2003–2012 LFS.

Table B.6 demonstrates the robustness of this result to a number of specifications and successive inclusion of fixed effects. Once again, estimated magnitudes are large. The average rate of leaving secondary education in our data is 11.8 percent. Estimates in Table B.6 indicate an increase in dropout rates for Muslim women exposed to the law of up to 60 percent of this long run average, a sizable effect.

Table B.6. Change in student status between spring and fall quarter

	(1)	(2)	(3)	(4)	(5)
Dep. Variable	Change in student status				
Muslim $\times$ 2004 or later	-0.0268 (0.0278)	-0.0701* (0.0365)	-0.0662** (0.0302)	-0.0542*** (0.0163)	-0.0561*** (0.0178)
Observations	8667	8667	8667	8667	1387
R-squared	0.00383	0.0984	0.100	0.107	0.136
Survey year FE	✓	✓	✓	✓	✓
Father's birthplace FE	✓	✓	✓	✓	✓
Age FE		✓	✓	✓	✓
Birth year FE			✓	✓	✓
Age $\times$ Father's birthplace FE				✓	✓
Sample 2003-2004					✓

**Notes:** The dependent variable is student status in quarter 4, difference from quarter 2. The sample is restricted to French-born women older than 16, who were in secondary education 2 quarters before. Data is from the 2003–2012 LFS. Standard errors clustered at the parent's nationality level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## B.4 Replicating LFS results using census microdata

To verify the robustness of the results in LFS, we use information from the 2011 1% sample of the French census microdata, which is part of the International Integrated Public Use Microdata Series (IPUMS International), collected and distributed by the University of Minnesota.<sup>29</sup> This dataset records parents' country of origin only for individuals whose parents are observed to live with them in the same household. While this is an unrepresentative sample of all individuals in our age range of interest, differences between this subsample and the broader population are not very large.<sup>30</sup> In any case, our empirical estimates of the ban's effect remain internally valid within this subsample. As in the LFS, we restrict our attention to the native born and code as "Muslim" women whose father was born in Algeria, Morocco, Tunisia, or Turkey and as "non-Muslim" those with fathers born in Italy, Portugal, Spain, France, or the European Union. We drop from the sample those with fathers born in non-specified parts of Europe, of Africa, or the rest of the world, which cannot be identified as predominantly Muslim. Figure B.5 shows the distribution of second-generation Muslim women by father's country of origin (upper panel), and plots differences in key variables between Muslim and non-Muslim French-born women (lower panel) in the IPUMS dataset. Second generation Muslim women are about 2 percentage points less likely to have completed secondary education than other French-born women, and about 6 percentage points less likely to be employed. Our empirical analysis demonstrates that these cross-sectional differences were amplified for cohorts affected by the 2004 ban.

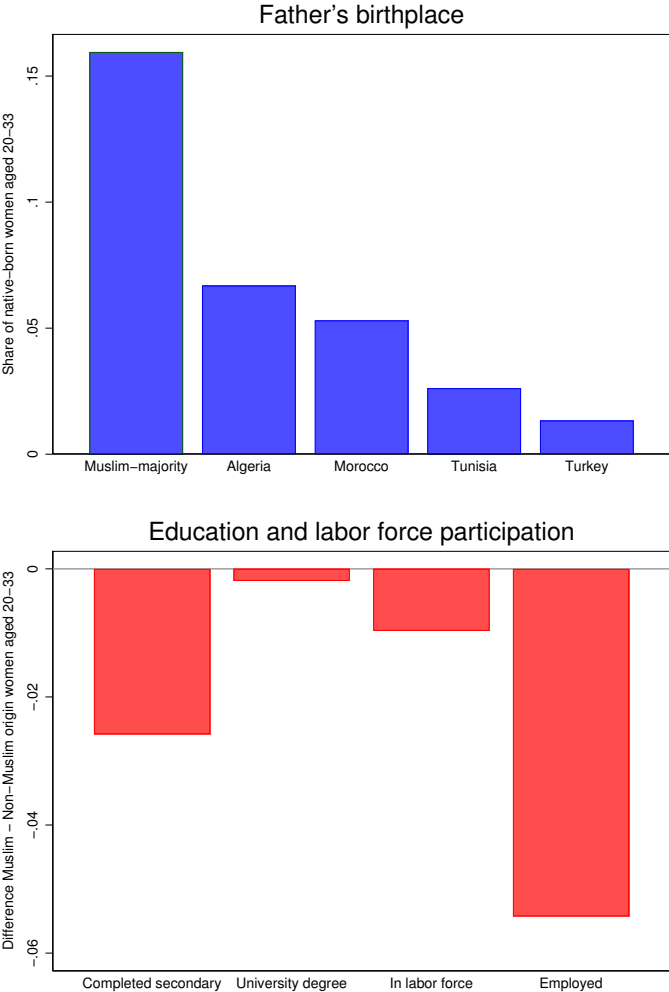
Table B.7 replicates the specification in equation 1 in the IPUMS sample. Results are

---

<sup>29</sup>The 2011 1% French IPUMS sample combines data from 2009 to 2013. The 2006 sample combines data from 2004 to 2008. Since the precise year of data collection is not specified, we cannot identify and exclude those observations that were collected before the passage of the 2004 ban (the first half of 2004). We thus chose not to use the 2006 sample.

<sup>30</sup>Compared to the full sample of women aged 20–33 in 2011, those living with their parents were 2 percentage points less likely to have completed secondary education and 1 percentage point less likely to be in the labor force.

Figure B.5. Second generation French women with father from Muslim-majority country



Source: 2011 IPUMS France. The sample consists of women aged 20–33 at census time. “Muslim” refers to women whose father was born in Algeria, Morocco, Tunisia or Turkey. The upper panel shows the distribution of second-generation Muslim women by father’s country of origin. The lower panel plots differences in key variables between Muslim and non-Muslim French-born women.

consistent with those from the LFS not just in direction, but also in magnitude. Column (1) replicates our main finding in the LFS on secondary educational attainment. The estimated (negative) impact of the law on secondary education completion for affected cohorts is 2.9 percentage points, essentially identical to that estimated in the LFS. Women are 0.5 p.p. more likely to be out of the labor force and 2.1 p.p. less likely to be employed. As before, we estimate near zero effects for the likelihood of marriage, but we do find a near-significant positive effect on the likelihood of marrying someone

from the same country of origin as the father for those women who are married. We estimate an identical increase in the likelihood of having children as in the LFS.

Table B.7. Effect on long-term outcomes in census microdata

Dep. Variable	(1)	(2)	(3)	(4)	(5)	(6)
	Completed secondary	Out of labor force	Employed	Married	Endogamous marriage	Has children
Muslim $\times$ Born after 1985	-0.0287*** (0.00358)	0.00500** (0.00213)	-0.0214** (0.00678)	0.00344 (0.00280)	0.122 (0.0910)	0.0284*** (0.00331)
Observations	203724	203724	203724	203724	872	203724
R-squared	0.00413	0.00281	0.0532	0.00775	0.288	0.0223

**Notes:** The sample consists of French-born women born 1980 or later and who were at least 20 years old at census year. Data is from the 2011 1% census microsample. “Muslim” refers to women whose father was born in Algeria, Tunisia, Morocco or Turkey. *Endogamous marriage* takes on the value one if the spouse is born in the same country as the individual’s father. The sample in column (6) is restricted to married women with a spouse present in the household. All regressions include birth year and religion fixed effects, as well as a linear Muslim-specific trend. Standard errors are clustered at the father’s birthplace level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## B.5 Effects of the 1994 circular

In 1994, substantive media attention was focused on the issue of the headscarf, without national legislative action. The controversy began with a teacher strike in Nantua in protest of four girls' refusal to unveil during gym class. Before this incident, student veiling was governed by a 1989 decision of the Council of State – the highest court in France on issues related to public administration – ruling that religious symbols did not violate secularism, but that schools could punish students whose religious signs threatened the neutrality of the school, disturbed public order, or broke school rules (Conseil d'État Assemblée Générale 1989).

In September 1994, French education minister Francois Bayrou responded to the 1994 “Affaire Akouli” by issuing a circular on veiling. The circular stated, “The wearing by students of discreet signs, manifesting their personal attachment to convictions, religious among others, is allowed in the school. But ostentatious signs, that in themselves constitute elements of proselytism or discrimination, are forbidden. Also forbidden are provocative attitudes, non-compliance with requirements concerning attendance and security, behaviors liable to constitute pressure on other students, to disrupt the conduct of teaching activities or to disturb order in the school.” (Bayrou 1994)

In general, this circular was perceived as a perpetuation of the status quo (Winter 2009). The circular was not legally binding (as a law is) and was open to interpretation. Moreover, decisions over veiling remained in the hands of principals and school administrators. In light of this ambiguity, the ultimate arbiter of headscarf cases remained the Council of State. It treated headscarf cases in the same way as before the 1994 circular, overturning expulsions where girls were expelled only due to the headscarf and sustaining expulsions where girls had broken school rules. Of the 49 cases that went before the Council of State between 1992 and 1999, 8 were upheld and the remainder overturned (Kaltenbach and Tribalat 2002).

Given the historical context, the 1994 headscarf affair seems a compelling instance of considerable public debate about the headscarf without national legislative action.

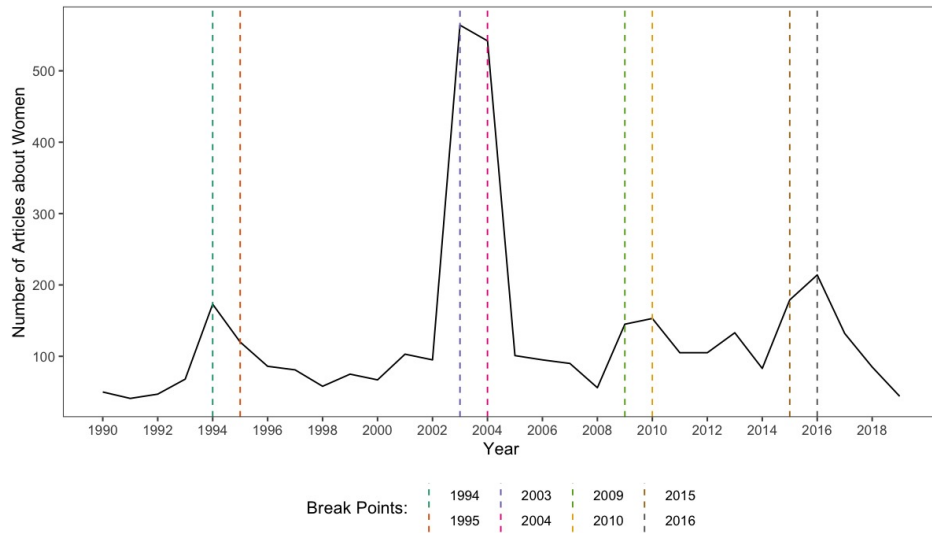


We verify the magnitude of the debate using data from Le Monde, one of the oldest and largest in circulation daily French newspapers, whose online article archive dates back to the early 90's. Via LexisNexis, we ran a keyword search using the algorithm: ('hijab' OR 'voile' OR 'foulard') AND ('musulman' OR 'musulmane' OR 'islam'). We download all articles from Le Monde meeting these search criteria, remove repeat entries and transform this dataset into annual counts of articles focused on veiling.

Figure B.6 depicts the time series of annual article counts. Peaks in the series coincide with known periods of debate around veiling, such as the 1994 circular, the 2004 headscarf ban and the 2010 ban on face covering, known as "burqa ban". To identify breakpoints in the counts of articles focused on veiling, we used an algorithm to detect spikes in a time-series rising above a user-set number of standard deviation over a window of time. This algorithm (`detect.spikes`) from the `pickPeak` R package (Weber et al. 2014) was implemented with a set number of 3 standard deviations and a window of 3 years. Vertical lines in Figure B.6 indicate those breaks. The algorithm identifies (1) 1994, the year of a governmental circular about veiling, (2) 2003-2004, the period of the headscarf ban's conceptualization and implementation, (3) 2009-2010, the period of the burqa ban's conceptualization and implementation, and (4) 2015-2016, the period that coincides with the introduction and removal of a ban on women's full-body swimsuits, also known as 'burkinis'.

We replicate our baseline analysis, by changing our definition of treated cohorts to those who were 18 years old or younger in 1994 (born in 1976 or later), and thus at school during the debate surrounding the 1994 circular. Figure B.7 replicates Figure 2 by extending the data back to cohorts born 1970 or later. It reveals a temporary dip in rates of completed secondary education for cohorts born 1975-1978, followed by a recovery, before the next, larger, drop for cohorts treated by the 2004 law. Table B.8 replicates Table 1 and verifies what is visually apparent in Figure B.7: cohorts "treated" by the 1994 circular experience a negative, though insignificant, drop in secondary completion rates that is about one third of the magnitude of the one estimated for

Figure B.6. Annual count of articles about the headscarf with endogenous peaks



The figure plots the number of articles about the headscarf annually from 1990 to 2019. This figure counts articles from the daily newspaper Le Monde. The lines indicate years of peaks in coverage. Data is constructed using LexisNexis database.

cohorts treated by the 2004 ban.

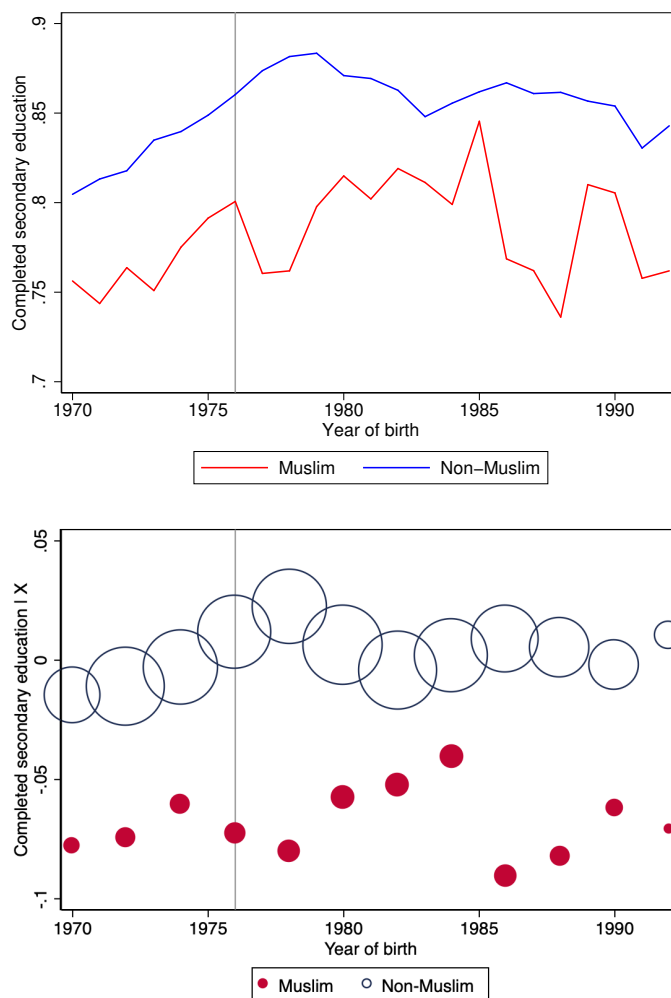
Table B.8. Effects on secondary education completion rates, 1994 circular

	(1)	(2)	(3)	(4)
Dep. Variable	Completed secondary education			
Muslim $\times$ Born after 1975	-0.0168 (0.0106)	-0.0165 (0.0106)	-0.0192** (0.00680)	-0.0217 (0.0128)
Observations	37989	37989	37986	37986
R-squared	0.00860	0.00894	0.0127	0.0127
Birth year FE	✓	✓	✓	✓
Father's birthplace FE	✓	✓	✓	✓
Survey year FE		✓	✓	✓
Age $\times$ Father's birthplace FE			✓	✓
Muslim-specific linear trend				✓

**Notes:** The sample consists of French-born women born between 1970 and 1980 and who were at least 20 years old at survey year. Standard errors are clustered at the father's birthplace level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

The counterfactual exercise is far from perfect. While the 1994 circular did not have the power of a law and did not make any de facto changes to the status quo, it was interpreted by many as an affirmation of schools' discretion to forbid veiling and expel students who did not comply. It thus likely changed behavior on the ground

Figure B.7. Effects of the debate surrounding the 1994 circular



The upper panel plots the raw proportions of Muslim and non-Muslim women who completed secondary education for each birth cohort. The lower panel plots residuals, aggregated over two-year cohorts, from a regression of an indicator for completed secondary education on age and survey year fixed effects. The vertical line corresponds to 1976, the first birth cohort impacted by the 1994 ministerial circular. The sample consists of French-born women born after 1970 and who were at least 20 years old at survey year. Circle size is proportional to sample size.

and hardened the stance of some educators.<sup>31</sup> The above results could thus also be interpreted as effects of the material changes that the 1994 circular effected in schools. This limitation of the analysis, alongside the lack of significance in estimated effects, provides limited evidence that a generalized anti-veiling debate can explain our main

---

<sup>31</sup>For example, expulsions appearing in front of tribunals rose to about 100 after the 1994 directive (Winter 2009).

estimated effects.

## C Data Appendix

### C.1 Variable description

---

Variable	Description
<b>LFS</b>	
Muslim	Indicator for father born in Maghreb or Middle East. Father’s country of birth based on variable PAIPERC.
Completed secondary education	Indicator for having at least a professional secondary degree (CAP, BEP, or equivalent). Coded based on variable DIP11.
Enrolled in secondary	Indicator for currently enrolled in secondary professional (CAP, BEP) or general/technological secondary education. Coded based on variable FORNIV.
In university	Indicator for currently studying for Bachelor’s degree or higher (including Grande École, Master’s, PhD). Coded based on variable FORNIV.
Change in student status	Student status coded based on the variables ACTEU6 and FORNIV, taking on the value one for those who are currently students enrolled in secondary education. Change computed between quarter 4 (fall quarter) and quarter 2 (spring quarter of previous year), for individuals who were enrolled in secondary education in quarter 2.
Out of labor force	Indicator for individuals coded as “inactive”, based on variable ACTEU.
Employed	Indicator for individuals coded as “actively employed”, based on variable ACTEU.
Lives with parents	Indicator for individuals coded as “child of reference person” in the household, based on variable LPR.
Has children	Indicator for individuals with children present in the household, based on variable EM1.
Married	Indicator for married individuals, based on variable MATRI.
<b>IPUMS</b>	

---

Variable	Description
Completed secondary	Indicator based on variable EDATTAIN.
Out of labor force	Indicator for inactive, based on variable EMPSTATD.
Employed	Indicator based on variable EMPSTAT.
Married	Indicator based on variable MARST.
Endogamous marriage	Indicator for individuals whose spouse (present in the household) was born in the same country as their father.
Has children	Indicator based on variable NCHILD.
<b>TeO</b>	
Completed secondary	Indicator for having at least a professional secondary degree (CAP, BEP, or equivalent). Coded based on variable F_DIP.
Repeated a class	Indicator for having repeated a class in France. Coded based on variable F_REDOUB.
School choice due to parents' religion	Indicator for having chosen a school outside their neighborhood due to parents' religious convictions. Coded based on variable F_SECTPQ_D.
Experienced racism	Indicator for individuals who mentioned they experienced insults or racist attitudes at any of a number of contexts. Variables D_OURACLA to D_OURACIJ.
Trust in French school	Trust of the respondent in the French school. Variable LECOLES. Coded on a 4-point Likert scale (1=Trust very much, 4=Do not trust at all), and recoded, so that higher values indicate more trust.
Seen as French	Opinion of respondent on the statement: "I am seen as French." Variable X_VUFRI. Coded on a 4-point Likert scale (1=Completely agree, 4=Completely disagree) and recoded, so that higher values indicate higher agreement.
Feel at home in France	Opinion of respondent on the statement: "I feel at home in France." Variable X_MOIFR. Coded on a 4-point Likert scale (1=Completely agree, 4=Completely disagree) and recoded, so that higher values indicate higher agreement.

---

Variable	Description
Feel French	Opinion of respondent on the statement: “I feel French.” Variable X_APPARF. Coded on a 4-point Likert scale (1=Completely agree, 4=Completely disagree) and recoded, so that higher values indicate higher agreement.
Feel [father’s nationality]	Opinion of respondent on the statement: “I feel [father’s nationality].” Variable X_APPARF. Coded on a 4-point Likert scale (1=Completely agree, 4=Completely disagree) and recoded, so that higher values indicate higher agreement.
Religiosity	
Subjective health	Subjective state of health. Coded on a 5-point scale (1=Very good, 5=Very bad). Variable S_ETAT.
Health problem: life, school-age	Indicator for health problem related to conditions of life or difficulties in private life and having started during school age. Combination of variables S_AGEPB, S_PBLOG and S_PBPRIV.
Health problem: existing condition	Indicator for health problem related to complications of an existing condition or pregnancy. Variable S_PBFrag.
Health problem: work	Indicator for health problem related to conditions at work. Variable S_PBTRAV.

---

## C.2 Summary statistics

Table C.2. Summary statistics - Women

Variables	Mean	S.D.	Min	Max	N
<u>LFS Repeated cross-section</u>					
Age	23.72	3.225	20	32	52201
Muslim origin	0.080	0.271	0	1	52201
Completed secondary	0.855	0.352	0	1	52155
Out of labor force	0.374	0.484	0	1	52201
Employed	0.514	0.500	0	1	52201
Lives with parents	0.355	0.478	0	1	52201
Married	0.098	0.297	0	1	52198
Has children	0.195	0.396	0	1	52201
<u>IPUMS</u>					
Age	22.896	2.704	20	33	203724
Muslim origin	0.159	0.366	0	1	203724
Completed secondary	0.899	0.300	0	1	203724
Out of labor force	0.0398	0.195	0	1	203724
Employed	0.490	0.500	0	1	203724
Married	0.0167	0.128	0	1	203724
Endogamous marriage	0.720	0.449	0	1	872
Has children	0.0268	0.161	0	1	203724
<u>TeO</u>					
Age	22.376	3.181	17	29	2642
Muslim	0.332	0.471	0	1	2608
Completed secondary	0.829	0.376	0	1	2638
Experienced racism in school	0.589	0.492	0	1	942
Trust in French school	3.225	0.683	1	4	2626
Seen as French	3.0620	1.046	1	4	2566
Feel at home in France	3.630	0.650	1	4	2622
Feel French	3.559	0.743	1	4	2624
Feel [father's nationality]	2.40	1.136	1	4	664
Religiosity	-0.208	0.789	-1.334	1.682	2619
Subjective health	4.416	0.695	1	5	2642

**Notes:** Data consists of French-born women born 1980 or later and is further restricted to women who were aged 20 or older at survey year in the LFS and IPUMS data. The LFS data pools survey years 2005-2012. IPUMS data is from the 2011 1% French census microsample. “Muslim” refers to women whose father was born in the Maghreb or the Middle East (LFS), in Algeria, Tunisia, Morocco or Turkey (IPUMS) and to religious identification (TeO).



Table C.3. Summary statistics - Men

Variables	Mean	S.D.	Min	Max	N
<hr/> LFS <hr/>					
Age	23.71	3.226	20	32	50852
Muslim origin	0.077	0.267	0	1	50852
Completed secondary	0.809	0.393	0	1	50768
Out of labor force	0.291	0.454	0	1	50852
Employed	0.587	0.492	0	1	50852
Lives with parents	0.475	0.499	0	1	50852
Married	0.0569	0.232	0	1	50851
Has children	0.098	0.297	0	1	50852
<hr/> IPUMS <hr/>					
Age	23.371	2.896	20	33	310370
Muslim origin	0.140	0.347	0	1	310370
Completed secondary	0.835	0.371	0	1	310370
Out of labor force	0.043	0.202	0	1	310370
Employed	0.557	0.497	0	1	310370
Married	0.0136	0.116	0	1	310370
Endogamous marriage	0.744	0.436	0	1	1878
Has children	0.00762	0.0869	0	1	310370
<hr/> TeO <hr/>					
Age	22.281	3.265	17	29	2597
Completed secondary	0.829	0.376	0	1	2638
Muslim	0.282	0.450	0	1	2556
Experienced racism in school	0.569	0.495	0	1	1076
Trust in French school	3.114	0.753	1	4	2579
Seen as French	3.064	1.056	1	4	2496
Feel at home in France	3.593	0.668	1	4	2564
Feel French	3.595	0.716	1	4	2567
Feel [father's nationality]	2.466	1.148	1	4	686
Religiosity	-0.229	0.784	-1.232	1.769	2570
Subjective health	4.528	0.625	1	5	2596

**Notes:** Data consists of French-born men born 1980 or later and is further restricted to men who were aged 20 or older at survey year in the LFS and IPUMS data. The LFS data pools survey years 2004-2012. IPUMS data is from the 2011 1% French census microsample. "Muslim" refers to men whose father was born in the Maghreb or the Middle East (LFS), in Algeria, Tunisia, Morocco or Turkey (IPUMS) and to religious identification (TeO).

### C.3 Predictors of religiosity and assimilation in TeO data

To identify predictors of religiosity and assimilation, we restrict attention to cohorts unaffected by the ban (those born before 1986) with a father from an identifiably Muslim-majority country, who were born in France. We focus attention to characteristics that are plausibly unaffected by the law, such as parents' religion, socioeconomic and educational background, as well as household and family characteristics from the respondent's childhood. Specifically, we use the following variables: an indicator for French mother, indicators for father from Algeria, Tunisia, Morocco, the rest of Africa, the Middle East, or Turkey, an indicator for parents from the same country of origin, indicators for Muslim father and mother, 8 indicators for father and mother's education, 12 indicators for father's and mother's occupation, 4 indicators for father's and mother's employment status, indicators for R raised in single- or dual-parent households, number of siblings, age of father and mother at R's birth and at arrival to France, an indicator for family speaking French at home, an indicator for becoming French at birth, two indicators for money trouble while growing up and parents sharing their migration history with R.

We use LASSO (implemented by the algorithm `lasso2` in Stata version 15) to identify predictors. For religiosity, LASSO identifies Muslim mother and French mother. For psychological assimilation LASSO picks Muslim mother, French spoken at home and father from Africa. For language assimilation, predictors identified are father has university degree, French mother, and French spoken at home.

We next regress each outcome (religiosity, psychological and language assimilation) on the relevant predictors identified by LASSO and compute fitted values. These fitted values constitute the predicted measures of religiosity and assimilation that we use for the estimation of heterogeneous effects.

## **D Interview protocol**

### **D.1 Objectives**

The qualitative phase of this research took place in 2010-2011 in Paris, France. The interviews were initially conducted in service of a 2011 study entitled “Muslim Identity Construction: To what extent is it reactive to public opinion”. The study sought to primarily understand the effects of the burqa ban, which went into effect in 2010, and the general Islamophobia the ban spurred on the religious identity and expression of French Muslim women. Additionally, the study sought to understand the effects of regulation of religious dress more generally.

To better understand the overall effect of state regulation of religion, the interviews touched on the 2004 law and its impacts. The expansiveness of the interviews also provides us with personal experiences and insights into the implementation of the 2004 law. We, therefore, aggregate respondents’ personal experiences with and general insights into the 2004 law to conceptualize the law’s impact.

### **D.2 Sampling**

Subjects were identified through snowball sampling. First, individuals were identified through visits and cold-emails to Muslim institutions (e.g. civic associations and religious classes) as well as introductions to female Muslims through the author’s friend networks. Respondents identified in this manner then referred friends through snowball sampling. This sample consists of Muslim women who actively self-identify as Muslim and enact this identity through their public behavior. It does not include Muslim women who identify as cultural Muslims or practice their religious identity privately.

Because the 2004 law targeted Muslim women, and particularly those who express their religiosity through veiling in school, this sample of respondents who strongly identify as Muslim is useful to understanding the impact of government regulation of Islam in France. The respondents are particularly helpful in allowing to understand

how devout Muslim girls were affected by the headscarf law.

Table D.1. Interviewee characteristics

Variable	Mean	SD	Min	Max	Obs
Age	27.3	6.9	18	47	20
Born before 1986	0.52	0.51	0	1	19
Attained BA	0.65	0.51	0	1	20
Attained MA	0.35	0.48	0	1	20
Attained Bac	0.95	0.22	0	1	20
Sub-Saharan Africa origin	0.25	0.44	0	1	20
Maghreb origin	0.65	0.42	0	1	20
Turkey origin	0.05	0.22	0	1	20

### D.3 Mode of data collection

Three different qualitative methods were employed: individual in-depth interviews, group interviews, and participant observation. Data from individual and group interviews are used in this study. The mode of data collection was semi-structured interviews, with prepared questions regarding several categories: background, religious practice, evolution of (religious) identity, effects of the headscarf ban, effects of the burqa ban, and Muslim experience in France. A list of questions that guided the interviews is provided below.

Interviews took place in cafes, restaurants, or homes of respondents, as per respondent preferences. Five interviews occurred with another person present, mostly a friend who also came to be interviewed and once a significant other. Interviews lasted between thirty minutes to two hours. Interviewee responses were always recorded through shorthand notes on interview forms. For interviewees who consented, interviews were also audio recorded and later transcribed. Interviews were primarily conducted in French with some use of English or Arabic as necessary.

## D.4 Analyzing interviews

The interviews were exploratory to better understand the effects of the burqa ban, specifically, and regulation of religion in France, more broadly. For this study, we focus on responses pertaining to the effects of the headscarf ban and state regulation of Islam as well as demographic questions. To formulate hypotheses about the impact of the 2004 law, we did the following. First, we summarize each respondents' answers to questions pertaining to the headscarf ban. These responses included personal anecdotes as well as insights based on observations of members of their own communities. Then, we used these responses to formulate expectations about the effects of the ban and about mechanisms through which the ban likely operated. The responses across the board attested to a negative effect of the ban, either based on personal experiences or observations, so we did not have to adjudicate among divergent responses.

## D.5 Interview questions

---

### Demographics

---

1. What is your name?
2. How old are you?
3. Where do you study or work?
4. Where do you live?
5. What is the demographic of your neighborhood? What is the socioeconomic makeup?
6. Are you socially involved in the neighborhood? For example, do you have a lot of friends that live there? Is your family close to the neighbors?

---

### Family background

---

1. Where did your parents grow up?
2. What occupations do your parents have?
3. What is their level of education? Where were they educated?
4. Describe your parent's religiosity? What is their religious identity? What are their religious habits/practices?
5. What habits/practices did you grow up with?
6. Is your mother veiled? Are your sisters?

Cont.

---

---

### Religious habits

---

1. Describe your religious identity
2. Is the type of Islam you practice different than that practiced by your family? By your friends? What are the points of distinction?
3. Where did you get your religious education? When and how were you first exposed to Islam? What did it signify to you? What practices did you see and how did you respond to them?
4. Do you veil? Why or why not?
5. Would you veil if you were in an Arab/Muslim country?
6. What does Islam mean to you personally? Is it important? Why?
7. Where does your religious knowledge come from?
8. Is there a distinction between the Islam practiced by young people and the Islam practiced by older people?
9. Do you think Islam is changing? Do you think the Muslim community is changing? Would you like there to be change? What kind?

---

### Education

---

1. Where did you attend school? What was the socioeconomic and demographic background of the school? Was the school diverse? Where did the students end up? Did they go to university?
2. Did you have a close group of friends? (What did you guys have in common? Were you friends for a long time prior? Are you still friends?)
3. Were there any veiled students in your high school? Was there ever a problem with the veil or with other Muslims?
4. What were the opinions of students and teachers about Islam? Did you have similar ideas about religion?
5. How did your peers affect your religious identity? Where many of your peers of a different religion?
6. Did you ever feel like you did not fit in with your peers/colleagues?
7. Were there many examples of Islamophobia?

---

### 2004 Headscarf ban

---

1. What were the general consequences of the 2004 headscarf ban on the Muslim community?
2. What was the atmosphere as these laws were being discussed and finally when they were passed? Was there is a sense that both laws were targeting individuals?
3. What were the specific consequences of the 2004 law for your life, in terms of school, employment, housing, and personal interactions?
4. How do you think the 2004 law affected the religious practices of Muslim women?

---

### 2010 Burqa ban

---

Cont.

- 
1. What were the general consequences of the burqa ban on the Muslim community?
  2. What was the atmosphere as these laws were being discussed and finally when they were passed? Was there is a sense that both laws were targeting individuals?
  3. What were the specific consequences of the burqa ban for your life, in terms of school, employment, housing, and personal interactions?
  4. How do you think the burqa ban affected the religious practices of Muslim women?
- 

### **Islamophobia**

---

1. What image of Islam exists in the public discourse? Where did this image come from?
  2. Does it affect everyday life for you? For Muslims in general?
- 

### **Employment**

---

1. Have you been employed? Have you had internships? Describe them a little bit?
  2. Have you ever had problems getting a job or an internship? Why do you think that is?
- 

### **Muslims in France**

---

1. Is there an overall Muslim community (overarching in Paris)? How is it divided/broken up?
  2. Does anything exist that attempts to bring everyone together?
  3. What role do associations play and on what level?
  4. Which associations have you been a part of and why? At what age?
  5. What motivated you to join these associations?
  5. Do you think the Muslim community in the suburbs is different than the Muslim community in Paris? Why? How?
-