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Can we teach civic attitudes?

Daniel Miles Touya*

Abstract

There is a large amount of evidence that shows higher levels of schooling are associated with a substantive increase in civic engagement. We empirically discuss this issue using Spanish data. In order to identify the existence of a possible causal link between schooling and civic attitudes, we use the discontinuity between compulsory schooling and minimum working age introduced in the 1976 law of employment regulation. We find that education has no significant causal effect on citizenship outcomes.

Keywords:

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1.-INTRODUCTION

A large body of research suggests that schooling creates other benefits to society that go beyond the increase in private earnings for the more educated. For example, evidence shows that education is related to reductions in the prevalence of crime, child mortality, or diminishes welfare dependence (Lochner and Moretti, 2001; Chevalier, 2004; Currie, 2001). In particular, the quality of a country´s democratic institutions or the civic engagement of its inhabitants has been shown to be associated with the schooling years of its population. Political scientists have found a significant positive correlation between higher levels of schooling and different measures of positive civic behavior. This correlation is usually interpreted as providing strong support that education is effective at promoting the quantity and quality of civic participation (Putman, 2001; Nie et al., 1996; Wolfinger and Rosenstone, 1980 among others).

Despite this positive correlation, there is not too much evidence that supports the causality of education on civic engagement. In other terms, the strong correlation between education and civic outcomes could occur because of many other reasons that are jointly positively affecting education and civic behavior. If this were to be the case, public policy intervention in order to enhance civic attitudes should focus on causes that simultaneously increase civic outcomes and education and not exclusively on education. For example, the positive correlation between schooling and civic engagemet is behind the proposals of the European Commission in order to use schooling as a way to increase the citizenship commitment of European people (Report on Citizenship, EC1997). However, if there is no causal link between education and civic involvement, those policies will be inefficient for enhancing democracy.

Recent empirical economic contributions try to mitigate this endogeneity problem using an instrumental variable approach. Dee (2004) and Milligan et al. (2004) suggest that the endogeneity of schooling in a citizenship outcome equation could be explained by family traits, such as the parents's political commitment, that could jointly affect their child's schooling and future civic participation. Using as an instrument of education the extra

schooling induced through compulsory schooling laws, the distance to college, number of colleges, or changes in child labor laws, they conclude that the causal effect of education on political involvement is not straightforward. While in the United States, they find a positive and significant effect of an increase in schooling on voter turnout, the effect practically disappears in the United Kingdom. One of the explanations given is the different electoral institutions in each country. When controlling for merely being registered to vote in the United States, the effect of schooling on civic participation diminishes significantly.

The concern of this paper is to contribute to the issue of identifying the causal effect of additional schooling on civic behavior using Spanish data. In order to find an instrumental variable that generates a possible exogenous variation in the individual level of schooling but that should otherwise be unrelated to adult civic outcomes, we use the gap between compulsory schooling and the minimum working age introduced by a Spanish national employment law in 1976. The minimum working age was increased from 14 to 16 years old in 1976 while the compulsory schooling age was 14 years old. This discontinuity pushed some of those students who were planning to drop out of school at age 14 in order to join the labor market to increase their number of years of schooling. In other terms, the instrumental variable we use identifies the causal link between education and civic outcomes for those who were going to abandon schooling in the absence of a change in the law, i.e. those at the margin between continuing schooling and joining the labor market. From a political point of view and in terms of the effect of schooling in the enhancement of democratic quality and civic attitudes, this subpopulation is perhaps the most interesting one, given that they are expected to be those mostly indifferent about political issues, since these individuals, without a change in the law, would be at the lower boundary of schooling years.

Analyzing Spanish civic attitudes and schooling could be of interest for several reasons. The average schooling of the population has increased significantly during the last decades; Spanish democracy is relatively new since the military regime ended by the mid 1970s; from a totally centralized government, Spain evolved toward a highly decentralized administration, possibly increasing the enthusiasm for political involvement; the Spanish society has been marked by highly conservative Catholic institutions, which could induce political

participation through religious norms; finally, since the begining of the democratic regime in 1975, there has been a continuous number of changes in the laws or regulations affecting schooling where enhancing citizenship was the common denominator in the preamble of these laws (LODE, 1984; LOGSE, 1990; LOCE, 2002; LOE, 2006). Despite these facts, political scientists have been arguing that the more than ever educated Spanish youths dislike or civic participation, e.g nearly seventy percent of Spanish between the ages of 15 and 24 shows no interest in politics (Megías, 2006; Torcal, 2006).

We find no evidence that an increase in schooling enhances citizenship outcomes for those who were at the margin of dropping out of school in the absence of the child labor law change. These results are in line with those obtained in recent empirical papers for other countries (Dee, 2004; Milligan et al., 2004). However, we do find that family traits have a significant effect on citizenship outcomes. In other terms, our findings raise the question on whether civic attitudes can be taught in the formal schooling system or is a result of an intergenerational transmission of civic values (Bekkers, 2005; Verba et al., 2003).

What follows is organized in five sections. In section two, we present and describe the data. In section three, we present the baseline estimates of different civic participation outcomes. In section four, we correct for possible endogeneity bias using an instrumental variable approach. In section five, we assess the validity of the instrumental variable. In section six, we conclude.

A FIRST APPROXIMATION TO THE DATA

This is an empirical paper where we examine citizenship outcomes using the Citizenship, Participation, and Democracy survey, a Spanish national representative survey carried out by the Centro de Investigaciones Sociológicas, a governmental research institution (CIS, E2450, 2002). The survey was collected with fact-to-face interviews of a random sample of the Spanish population with particular emphasis on the regions of Catalonia, Madrid, and Basque Country. The dataset pulls together demographic information of the respondents with a wide and deep range of questions about political affiliations, voting behavior, civic

participation, and attitudes. There are two important aspects that make this survey of interest. In the first place, it is of interest as it includes some approximation to the political behavior of the respondents' parents as well whether the respondents' civic behavior was affected by a lived experience that impacted the respondents' political way of thinking such as the civil war or the transition to democracy. In the second place, it contains many questions on voting preferences and political activity such as whether the individual is interested in politics, the feelings politics generate or "how often respondents watch news on television or read a newspaper," etc. The total sample includes 4242 respondents aged 18 or older in the year 2002. We have selected a subsample of 3006 respondents of age 20 to 60, so in the 2000 national elections, the younger respondent was 18 years old, the minimum age to vote in Spain.

In Figure 1, we graph several citizenship outcomes against schooling.

Insert Figure 1

These graphs show that the stated empirical regularity which establishes that more education implies more civic engagement seems to be observed in Spain. In other terms, it seems that an increase in education positively affects political involvement. However, despite this interpretation, we cannot infer whether increasing education enhances political participation. The positive relation between both could be explained by unobservable factors that simultaneously increases schooling and civic engagement.

BASELINE ESTIMATES

In this section, we establish an empirical baseline by estimating the effects of years of education on civic attitudes using OLS. In order to evaluate civic attitudes, we analyze different citizenship outcomes, as is usual in this literature, for example, the importance in life one attaches to politics, feelings political issues inspire; whether the respondent frequently discusses politics in general and with friends, associacionism measured as group membership; level of trust in politics; whether the respondent believes politicians only behave on self-interests, political interest; newspaper readership; participation in political

demonstrations; voter turnover in last elections, and whether the respondent could identify the president of the European Commision or of the Spanish Labor Unions (Chevalier, 2004; Milligan et al., 2004).

Table 1 presents the estimated marginal effects from single equation OLS regression in which we use different measures of civic behavior as dependent variables.

Insert Table 1

The results suggest additional years of schooling led to a statistically significant increase in civic engagement. In general, the partial correlation between education and civic engagement is positive and significantly different from zero, which confirms what is usually observed in other countries, that more education is associated with higher civic involvement. Observe also, that voter turnover is not significantly partially correlated with years of education. In other terms, when we condition over a subset of explanatory variables, results of Table 1 suggest education and voting are not correlated. This finding has been already discussed in the Spanish literature, arguing that there are no clear links between education and voter turnover. Similar evidence has been found for the United Kingdom, where the institutional voting system is very similar to that in Spain[1]. Additionally, family traits and being marked by a lived political experience have a significant partial correlation with civic outcomes. That is, the respondent's parents' behavior when he was young seems to be an important source of intergenerational transmission of civic values or political socialization (Verba et al., 2003). On the other hand, any lived experience that affected the political way of thinking of the respondent seems to have a profound effect on citizenship outcomes, as was commonly assumed in different sociological debates related with the citizen's political involvement in non-democratic countries (CEAAL, 1986; Roche, 1992; Manji, 1998).

[1]In Spain, every citizen is automatically included in the electoral census by the Electoral Registration Office, a public institution, when they turn 18 years old. A form is sent to each elector specifying the place where he will vote. Additionally, those electors that have moved to other regions or countries have the right to change his voting zone or to vote by mail. In both of these last cases, the elector is required to notify the Electoral Registration Office of a change in the voting zone. Finally, electors have the right not to vote without any type of fine for not voting.

In sum, the above OLS estimates could be interpreted as if increasing educational achievement enhances the quality of its democracy. However, it is possible that those estimates were biased by unobserved characteristics associated with schooling and outcomes. If these unobserved characteristics that simultaneously affect civic outcomes and schooling were family traits, as usually suggested by many political scientists, the fact that we condition on them allows us to obtain a consistent estimate of the impact of education on civic engagement in specifications that assume the absence of omitted variable bias (Moffit, 1996; Moffit, 2003). Hence, if these assumptions are correct, we could interpret the above estimates to reflect a causal relationship between civic outcomes and schooling. In this line, our findings would suggest a positive externality of education on democratic quality.

Nevertheless and despite of family traits, those estimates could be affected by an ability bias in the same sense as in a return to schooling model. Ability could simultaneously increase education and comprehension of political issues and hence, introduce a bias in the effect of schooling on political engagement. People with higher ability are more productive in both schooling and civic engagement. In order to asses whether we could speak of causality of schooling on citizenship outcomes, we should exploit some exogenous variation in these measures of schooling. In the next section, we use an instrumental variable method in order to correct for ability bias.

THE GAP BETWEEN CHILD LABOR LAWS AND COMPULSORY SCHOOLING

The fundamental requirements for an instrument are that they actually influence educational attainment and that they are uncorrelated with the unobserved determinants of civic engagement (Angrist, 2004). The instrumental variable we use in this paper has to do with the modification of child labor laws that in 1976 introduced a discontinuity between compulsory schooling age and the minimum employment age.

In 1976, the Spanish government increased the minimum working age from 14 to 16 years

old (BOE 24/02/44; 21/04/44; 21/04/76, L16-1976)[2]. The compulsory schooling age was increased in 1970 from 12 to 14 years old with the government assuring free education within these ages (BOE, 18/07/45 and BOE 6/08/1970). Additinally, this 1970 education law also established free education, though not compulsory, for those students who wanted to study at the first level of professional schools once finishing compulsory schooling beginning at age 14 and lasting until age 16 (A. 2, LGE BOE 6/08/1970)[3]. In sum, the modification of these laws introduced a discontinuity between the minimum working age, which was established at 16, and the legal dropout schooling age, established at 14. We will use this discontinuity as an exogenous shift on schooling years.

The effect of child labor laws on schooling is well documented (Acemoglu and Angrist, 2000; Lochner and Moretti, 2001). Increases in the minimum working age was shown to affect educational attainment or at least, to increase the number of full-time schooling years, i.e. to postpone dropout. In many countries, the minimum employment age coincides with the legal compulsory schooling age or is defined as the minimum number of schooling years a child has to attend school before beginning to work. Hence, changes are simultaneous in the sense that a movement of the minimum working age implicitly implies a movement of the compulsory schooling age, i.e. there is a direct exogenous increase in years of schooling (Acemouglu and Angrist, 2000; A Right to Education Report, 2006). In Spain, the increase in the minimum employment age generated a discontinuity between the legal leaving schooling age and the minimum working age. Therefore, there is not a direct or mandatory increase in the number of schooling years for the whole 14-year-old student population (Ousteopoulus, 2006). However, it could be expected that the schooling dropout behavior of some students were affected by the introduction of this discontinuity (Chevalier, 2004).

In Table 2, we present the 2SLS where the dependent variables are different citizenship outcome measures, and the schooling instrumental variable is a step variable taking a value

[2]There was a minor exception established for children 15 years old that they could work as part of a training program, but they had to fulfill some requirements established by the authorities.

[3]Given that we work with individuals born before 1984, we do not consider the change in compulsory schooling age introduced in 1990.

of zero for all those born before 1962 and one for all those born after this year. This variable tries to capture all the cohorts affected by the discontinuity introduced in 1976, which forced 14-year-old students to postpone the labor market transition until age 16.

Insert Table 2

On the one hand, the 1976 step variable is positively and significantly associated with an increase in the number of years of full-time education. Morover, and as the literature usually argues, family traits affect significantly the number of years of full time education.

Two overall conclusions are suggested by the results of Table 2. In the first place, it seems schooling has no causal effect on civic engagements for those individuals idintified by our instrumental variable. In other terms, there is no causal link between civic involvement and education for those that changed their schooling dropout decision as a consequence of the increase in the minimum working age. In this sense, we identify no schooling externalities over civic engagement for this subpopulation of individuals. The impact of schooling on civic engagement we find for Spain is similar to what Milligan et al. (2004) report for the United Kingdom. In the second place, family traits, represented by political discussions or parents' active membership when the survey respondent was an adolescent as well as a lived political experience that affected his way of political thinking seem to be relevant in explaining civic outcomes.

The above findings are not far away from the political research that questions the active citizenship involvement of European people (Giddens, 1999). In this sense, we could interpret those findings as suggesting the Spanish educational system lacks the mechanisms to adequately transmit democratic values, or in the event the educational system accomplishes the role of democratic value transmission, the contextual environment where individual socialization process evolves neutralizes any type of civic engagement value transmission (Dubet and Martucelli, 2000; Gutmann, 1998).

AN ASSESSMENT OF THE INSTRUMENTAL VARIABLE

In this section, we will discuss whether the instrumental variable we use seems to introduce an exogenous variation on the number of full-time schooling years. We first analyze whether the discontinuity affected the number of full-time schooling years. Second, we try to identify which particular subpopulation of students was affected by this discontinuity, i.e. to whom are we identifying with the exogenous schooling variation induced by the child labor law. Unfortunately, Spanish datasets are scarce in order to analyze these issues in both the information reported and the size of the samples. For this reason, we will use different surveys in order to discuss these points.

In Spain, the enrollment ratios for 15-year-old individuals increased significantly between 1970 and 1990. The enrollment rates of 15-year-old individuals increased less than ten percentage points between 1970 and 1975, from 35.5 to 44.4, but between 1975 and 1980, it increased nearly 25 percentage points, reaching 68.5 in 1980. Ten years after the law was passed, in 1987, this rate reached 76% to finish at 89% in 1990 just before the compulsory schooling age was increased by a new law (Fernandez, 2000;Escudero, 2002). Hence, it seems those students who were 15 years old delayed their schooling dropout behavior fundamentally in the second half of the 1970s. In order to assure the observance of labor laws, the government Labor Inspection Office was reinforced in the middle of the seventies with a substantial increase in personnel and budget in order to guarantee the labor rights; e.g. between 1975 and 1985 the number of job openings for the Labor Inspection office increased by seventy percent with respect to 1964-1974 (Senabre, 2006). Additionally, the 1970 education law assured free professional schools for post-compulsory schooling students between ages 14 and 16. The governmental authorities, in order to satisfy the expected increase in demand, substantially increased the number of professional schools, which where almost doubled between 1970 and 1980. In particular between 1974 and 1977, these schools increased by nearly sixty percent (INE, 1980)[4]. Finally, though it is not possible to contrast,

[4]In Miles (2006) we use as intrumental variable the number of professional schools available in the province were the respondent lived at age 16.

many students could have used the discontinuity to finish their actual degree at age 15 because school failure rates were relatively high. That is, the increase in the minimum working age could have not increased the degree of completed education, but instead, students could have used this time to finish their primary education degree. Thirty four percent of the 1961-1962 student cohort or, in numbers 177.526 students, did not graduate at age 14 from primary school in 1975-1976, and many of them could have used the time until work to finish their actual degree (Tena Artigas et al. 1978)[5]. In sum, the above evidence could suggest that the change in the child labor law affected the number of full-time schooling years.

In order to get more insight on whether changes in the law affected schooling behavior, we use the 2002 Spanish Labor Survey (EPA)[6]. Though the information recovered by this survey is scarce in relation to a student's characteristics when he was age 14, i.e. his parents' education, income, place of residence at age 14, etc., it recovers the respondent's years of full-time schooling, and the number of observations is particularly large. We use this survey in order to assess whether we can find some positive association between the 1976 child labor law and the increase in the number of schooling years, considering there is a large number of observations. In Table 3, we present the estimates of regressing years of schooling on a set variable that takes value 1 for those cohorts born after 1962, i.e. all those individuals affected by the child labor law change. We have tested different specifications as well as defining the set variable in other years.

Insert Table 3

Overall, we observe the discontinuity introduced with the 1976 child labor reform had a positive effect on the years of full-time schooling. The 1976 step variable is positive and significantly different from zero in all three specifications: the first one only includes the 1976 step variable; in the second specification and in order to capture a possible trend, we

[5]Usually Spanish surveys report the highest schooling degree and not the number of schooling full-time years. The former information does not allow us to correctly identify the impact of the child labor law because of the issue discussed in the above paragraph.

[6]We use the same year in order to have some homogeneity with the CIS survey.

included a linear cohort trend; finally, we added a trend starting in 1976 in order to capture the possibility of an incremental effect of the law in different years. Hence, we could argue that the discontinuity could have affected the schooling decisions of those students who were expecting to dropout at age 14[7]. We have additionally tested whether defining the step variable in any other year after the 1970 education reform had some effect. In a specification with sex, age and age square, all the step variables defined for years before 1976 are significant. However, when we add a trend variable, the significance of these variables disappears, and all the effect is captured by the trend. This does not happen for the 1976 step variable, neither if we define a trend variable starting in the 1976 year to recover the effects over time after the law was passed.

Despite the above findings, the positive association between schooling years and the 1976 step variable could be explained by the dramatic sociopolitical changes Spain started to experience in the mid-1970's and not by the child labor law change. In other terms, the increase in schooling years could be explained by the sociopolitical transformation that began just after the end of the military regime and not by the discontinuity between schooling dropout age and minimum legal working age. In order to assess whether a discontinuity between compulsory schooling age and minimum working age increase the number of schooling years, we will analyze what happened to those born between 1940 and 1956. For those born during these years, compulsory schooling age was 12 and minimum working age was 14. That is, there was a discontinuity and additionally, the sociopolitical conditions were more stable than in the 1970s. Using 2002 EPA data, in Figure 2, we plot the median and fourth percentile nonparametrically smooth on year at age 14.

Insert Figure 2

This figure suggests for those born before 1960, the discontinuity between compulsory schooling age and minimum working age could have induced an increase in the number

[7]In Gimenez and Miles (2006), we show that an altruistic father will enforce his child to continue study instead of doing nothing after finishing compulsory schooling and under the existence of a minimum working age discontinuity. Hence, most students will continue studying.

of full-time years of schooling. Additionally, different social science Spanish researchers emphasized that beginning at the end of the 1950s, most employers demanded the elementary baccalaureate degree of their employees in order to get the job[8] (Capitan-Díaz, 1994; Lorenzo Vicente, 1996).

In sum, the partial evidence discussed above supports the feeling that the increase in the minimum working age had delayed the full-time schooling dropout age beyond what was established by compulsory schooling.

Finally, an important issue is that not all the students ending compulsory schooling at 1976 or after were presumably affected by the child labor law modifications. The instrumental variable only identifies the impact of schooling on civic attitudes for those students whose schooling behavior was affected by the schooling-employment discontinuity (Angrist, 2004). In general terms, we could expect the affected students were those with a high opportunity cost of studying, i.e. those that before the child labor law change were planning to drop out of school just after reaching compulsory age education.

In order to analyze this issue, let us consider three types of students. A first type were those that had the intention of completing high school or college independently of whether there was a change in the child labor law or compulsory schooling age, i.e. the always takers. The schooling decisions for this subpopulation of students was not affected by changes in the child labor law. A second type of students were those thinking to begin work once reaching compulsory age education. This type of students seem to be the ones whose schooling behavior was affected by the law. They were obliged to wait until 16 in order to start work once finishing compulsory education at age 14. In Angrist (2004) terms, this is the subpopulation of compliers, those whose schooling behavior were affected by the instrument. Finally, the third subpopulation were the never-taker students, i.e. those that would not study in any case.

[8]The 1953 middle school reform introduced a unified block from 10 to 14 years old called the elementary baccalaureate though it did not modify the compulsory schooling age, left at 12. This modification implicitly pushed students to finish the entire block before entering work in order to gain some degree (though the failure rate was particularly large).

In order to assess the existence of compliers, we should find evidence of an increase in the schooling years ex-ante and ex-post the law modifications for those students with a high schooling opportunity cost. This subpopulation could be characterized as poor families confronted with credit restrictions, parents with less schooling than the norm, living in rural regions, with many siblings etc. A possible strategy, following Card (1995) or Kling (2000), would be to regress schooling years on interaction terms of the law changes over those variables characterizing this type of students and analyzing the significance of these estimates. Unfortunately, and according to our knowledge, there is very scarce information available in Spain in order to assess and identify the characteristics surrounding the student's family when he was ages 14 to 16, i.e. place of residence at age 14, the family income, parents' education or employment, etc. Therefore, it is very difficult to test our assumptions on which students are identified by our instrumental variable (Angrist et al., 1996).

Nevertheless, we can have some approximated results using a survey that reports information on employees, the Encuesta de Calidad de Vida en el Trabajo. This survey is a national representative workers survey, and respondents have to answer some questions about his family characteristics when he was age 16, such as the highest level of schooling achievement he reached when he began to work, i.e. it has no data on years of full-time schooling[9] as well as his age when he started to work more than three months continuously. We have pooled the years 2001 to 2004 in order to have more observations and selected a subsample of those born between 1940 and 1982.

The increase in the minimum working age should have delayed the entrance age into the labor market and as a consequence, could have had increase the full-time schooling years. In Figure 3, we plot the proportion of respondents that reported having an educational degree that implies staying in school after 14 years old against the age the respondent reported when he began to work more than three months continuously, separated between those born

[9]As stated before, the discontinuity between dropout age and minimum working age could have increased the age at which an individual ended full-time education but not the educational degree achieved, i.e. many students could have opted to finish primary school but not increase the level of education at a high school.

before and after 1962.

Insert Figure 3

This figure suggests a positive correlation between schooling achievement and age starting to work, i.e. those who started working older had spent more time studying, or those who drop out of school later began working at an older age. In this sense, the change in the child labor force seems to have affected schooling.

In Table 4, we present the marginal effect of the age of entrance into the labor market on reaching an educational degree, which implies dropping out of school later than age fourteen. Naturally, beginning working age is endogenous, so we use the 1976 step variable as well as interactions with some family characteristics when the respondent was age 16 as instrumental variable. These last interaction terms allow us to identify whether those with a higher opportunity cost of schooling were affected by the child labor laws.

Insert Table 4

In general terms, the discontinuity introduced in 1976 delayed the labor market entrance age, particularly for those with less educated parents or where the head of the household was the mother when the respondent was age 16. The gap between the legal schooling dropout age and the labor market minimum age entry seems to have affected those with a higher opportunity cost of studying. Additionally, this delay had a positive impact on the achievement degree of this type of students.

In sum, the partial results presented in this section give some confidence that the law introduced in 1976 affected schooling years. This implies that our conclusion in the previous section, in the terms that schooling does not enhances civic outcomes, is only applicable for those students in the margin of staying in school or dropping out to work in the absence of any child labor law modification. As stated by Heckman et al. (2004), these are just the individuals more interesting for economic analysis.

CONCLUSION

In this paper, we empirically contribute to the literature attempting to find evidence on whether increasing schooling improves the quality of democracy. We observe that inducing those who are indifferent between continuing in school or going into the labor market to increase their education has no significant causal effect on civic engagement. However, family traits and lived political experiences that affected the individual's political way of thinking do have an important and robust effect on citizenship outcomes.

Following recent empirical economic papers which study the existence of educational civic outcome externalities, our results could suggest that schooling does not increase civic engagement of those that would have studied only compulsory schooling in the absence of child labor law changes. Even worse, they could suggest a lack of transmission of democratic values in the Spanish educational system. However, this conclusion or interpretation does not take into account the political contextual framework where education and political socialization evolves (Dubet and Martucelli, 2000).

Dee (2004) and Milligan et al. (2004) found schooling increased voter turnout in the USA when we do not condition for being registered to vote. The political institutions in the USA give an active role to citizens: registering to vote is a decision an individual has to make in order to have the right to vote. Additionally, in many other instances of American life, the citizen has to put forward his decisions and actions in order to accomplish his rights. In this sense, the American citizen is responsible for the consequences of his decisions, not the government (Putnam, 1995). On the other extreme, in European welfare states, as Roche (1992) argues, citizens were conceived as rights-claimers, where the government assumed a paternalistic role and drove citizens to complete passiveness. In other terms, the welfare state political environment delivered passive citizens independently of the level of schooling. Giddens (1999) criticizes the vertical action of the government that gave birth to a passive conception of citizenship and emphasizes the need for empowering citizens to make them responsible of the consequences of their acts. Durston (1999) shows how institutional frameworks affect civic behavior, in the sense of favoring or neglecting civic implication or

participation.

In this sense, the Spanish political institutions that supported the development of the welfare state could have neutralized the schooling effects on citizenship engagement, i.e. contextual effects annulates the transmission of democratic values of schooling (Manski, 1990; Cohen and Arato, 2000). The analysis is not far from what is now being discussed in the European Commission about the need for an increase in active citizenship through a change in the way the welfare states respond to its inhanbitants' needs (Citizens for Europe programme, 2005).

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Table 1: OLS maginal effect of schooling years, family traits and political personal experience on civic behavior and attitudes.

Dependent Variable	Schooling	Family Traits	Personal Experience	N.obs
Political value in life	0.0048 (0.0014)	0.0771 (0.0119)	0.0846 (0.0224)	2759
Political feelings	0.0088 (0.0018)	0.1212 (0.0167)	0.1028 (0.0198)	2792
Political discussions	0.0161 (0.0021)	0.2444 (0.0192)	0.2007 (0.0211)	2792
Friends: political discussions	0.0163 (0.0020)	0.2242 (0.0191)	0.1804 (0.0212)	2792
Group membership	0.0088 (0.0021)	0.1335 (0.0189)	0.1487 (0.2161)	2783
Trust	0.0114 (0.0019)	0.0516 (0.0166)	0.0697 (0.0190)	2783
Polycimakers are self-interest	0.0010 (0.0014)	0.0186 (0.0121)	0.0124 (0.0134)	2784
Political interest	0.0168 (0.0019)	0.1826 (0.0169)	0.2142 (0.0205)	2792
Newspaper readership	0.0246 (0.0197)	0.0894 (0.0177)	0.1291 (0.0207)	2792
Political demonstrations	0.0162 (0.0021)	0.1084 (0.0194)	0.2307 (0.0211)	2792
Voted last presidential	0.0026 (0.0018)	0.0259 (0.0165)	0.0429 (0.0169)	2792
Identify EU president	0.0189 (0.0017)	0.0351 (0.0141)	0.0605 (0.0168)	2792
Identify L. Union president	0.0187 (0.0020)	0.0663 (0.0177)	0.0865 (0.0205)	2792

All models include age, age square, a binary indicator for sex, catholic religuious intensity, Madrid, Barcelona, Vizcaya, Alava, Guipuzcua, Granada, Jaen, Málaga, Sevilla, Valencia.

Table 2: 2SLS Citizenship outcomes on schooling years and family traits

Dependent Variable	Schooling	Family Traits	Personal Experience
Political value	−0.0074 (0.0324)	0.0884 (0.0565)	0.0968 (0.0440)
Political feelings	−0.1252 (0.0784)	0.3475 (0.1346)	0.2822 (0.1102)
Political discussions	−0.0521 (0.0595)	0.3596 (0.1021)	0.2919 (0.0834)
Friends: political discussions	−0.0283 (0.0546)	0.2997 (0.0944)	0.2403 (0.0765)
Group membership	−0.0999 (0.0739)	0.3160 (0.1256)	0.2956 (0.1041)
Trust	−0.0141 (0.0479)	0.0950 (0.0824)	0.1043 (0.0677)
Self-interest	0.0466 (0.0434)	−0.0577 (0.0742)	−0.0482 (0.0602)
Political interest	−0.0803 (0.0641)	0.3466 (0.1104)	0.3441 (0.0898)
Newspaper readership	−0.0599 (0.0622)	0.2322 (0.1069)	0.2422 (0.0874)
Political demonstrations	−.01456 (0.0538)	0.1603 (0.0926)	0.2718 (0.0750)
Voted last presidential	−0.0142 (0.0456)	0.0544 (0.0791)	0.0654 (0.0627)
Identify EU president	0.0651 (0.0449)	−0.0427 (0.0772)	−0.0011 (0.0636)
Identify L. Union president	0.0784 (0.0566)	−0.0346 (0.0981)	0.0065 (0.0800)
First stage estimates			
d1976	0.6668 (0.3133)		
Family traits	1.6951 (0.1674)		
Personal Experience	1.3274 (0.1852)		
F-p-value	0.0000		
Hausman test	36.47		
p-value	0.000		
N observations	2759		

Individuals born between 1949 and 1982. All models include age, age square, a binary indicator for sex, catholic religuious intensity, Madrid, Barcelona, Vizcaya, Alava, Guipuzcua, Granada, Jaen, Málaga, Sevilla, Valencia.

Table 3: OLS maginal effect of 1976 step variable on age ending full-time education based on Spanish Labor Survey 2002

Dependent Variable	Specification		
Age ending full-time education	(1)	(2)	(3)
d1976	0.2941 (0.0620)	0.1893 (0.0627)	0.1263 (0.0632)
d1976*trend			0.1402 (0.0188)
Modifying step variable			
d1971	0.0288 (0.0677)	−0.0046 (0.0677)	
d1972	0.1064 (0.0655)	0.0552 (0.0656)	
d1973	0.1727 (0.0638)	0.0525 (0.0646)	
d1974	0.1454 (0.0627)	−0.0915 (0.0657)	
d1975	0.1856 (0.0621)	0.0464 (0.0632)	
d1977	0.3917 (0.0624)	0.2774 (0.0632)	

Number of observations: 98146 for individuals born between 1940 and 1982. (1) age, age square, a binary indicator for sex. (2)plus linear cohort trend variable (3) plus an interaction 1976 with trend.

Table 4: 2SLS Age entrance labor market and more thatn 14 year old schooling degree based on Labor Life Quality Survey 2001-2004

First Stage	Dependent Variable
	Age entrance labor market
d1976	0.8556 (0.1989)
Father primary or less schooling	−2.898 (0.1794)
d1976*Father primary or less schooling	0.0908 (0.0344)
Father secondary schooling	−0.9420 (0.2142)
d1976*Father secondary schooling	−0.0259 (0.0394)
Mother head household when 16	−0.7326 (0.2719)
d1976*Mother head household when 16	0.0708 (0.3427)
Living at a small town when age 16	−0.0583 (0.1611)
d1976*Living at a small town when age 16	−0.3220 (0.2161)
Second Stage	Schooling degree age over 14
Age entrance labor market	0.0562 (0.0093)

Number of observations: 21202 individuals born between 1940 and 1982. Includes age, age square, a binary indicator for sex, linear cohort trend variable.

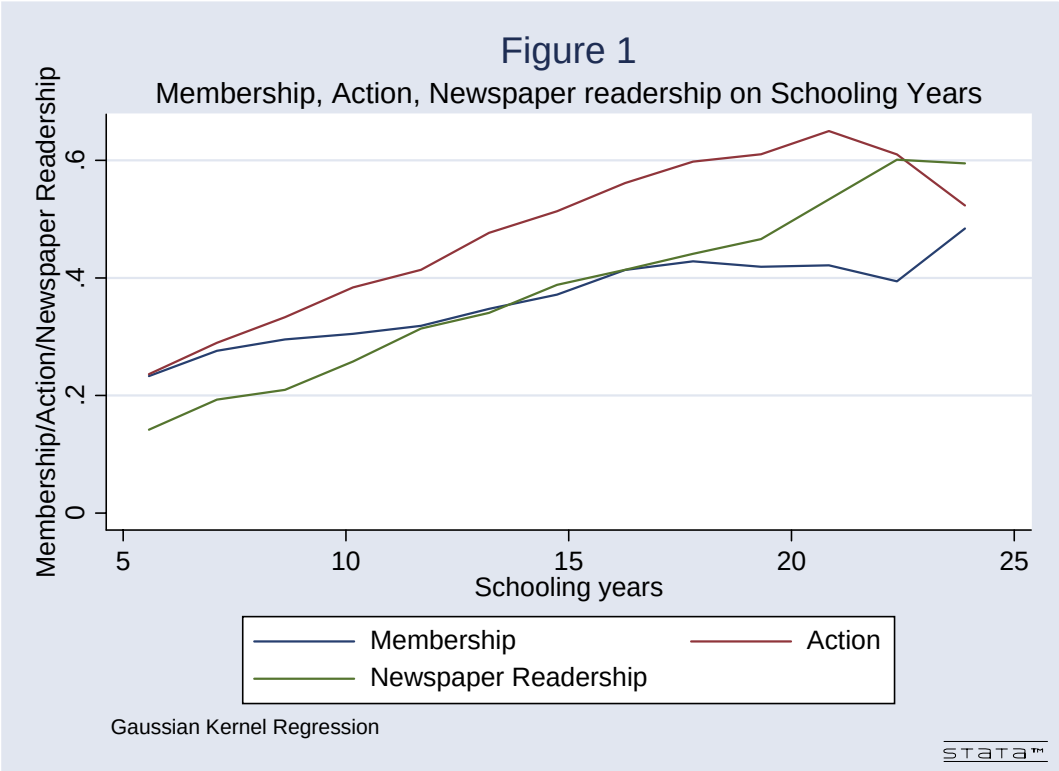
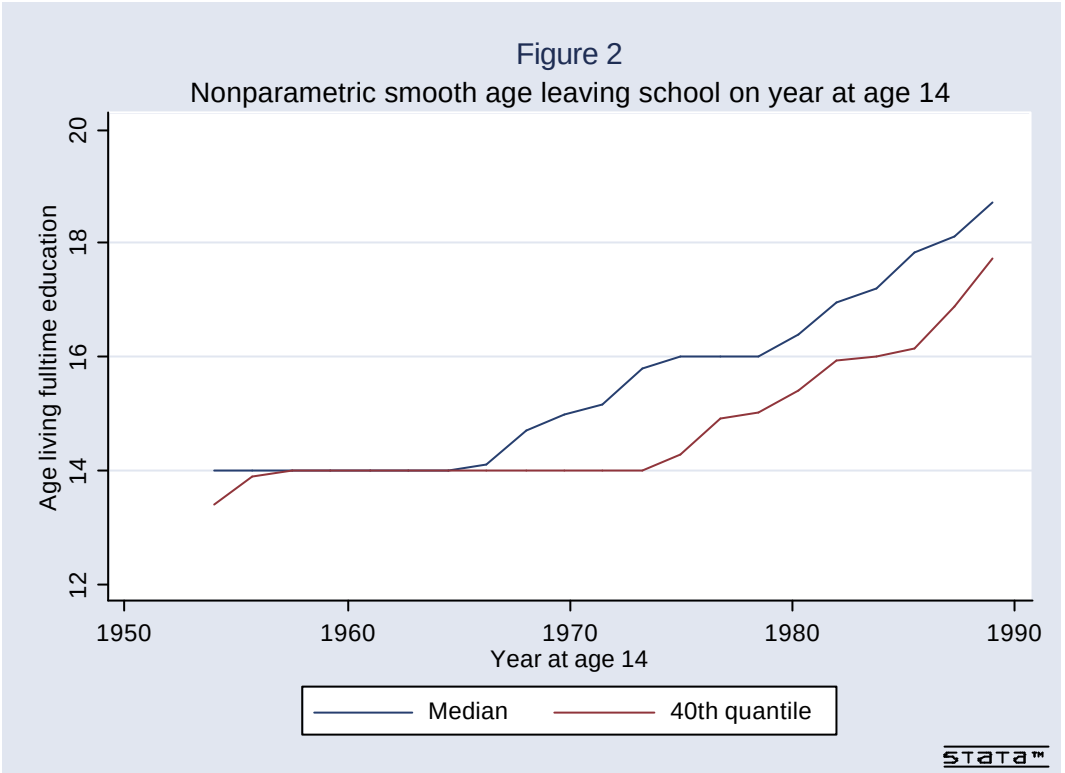


Figure 1
Membership, Action, Newspaper readership on Schooling Years
Membership/Action/Newspaper Readership
0
.2
.4
.6
5
10
15
20
25
Schooling years
Membership
Action
Newspaper Readership
Gaussian Kernel Regression
stata™

Figure 2


Nonparametric smooth age leaving school on year at age 14
Age living fulltime education
12
14
16
18
20
1950
1960
1970
1980
1990
Year at age 14
Median
40th quantile

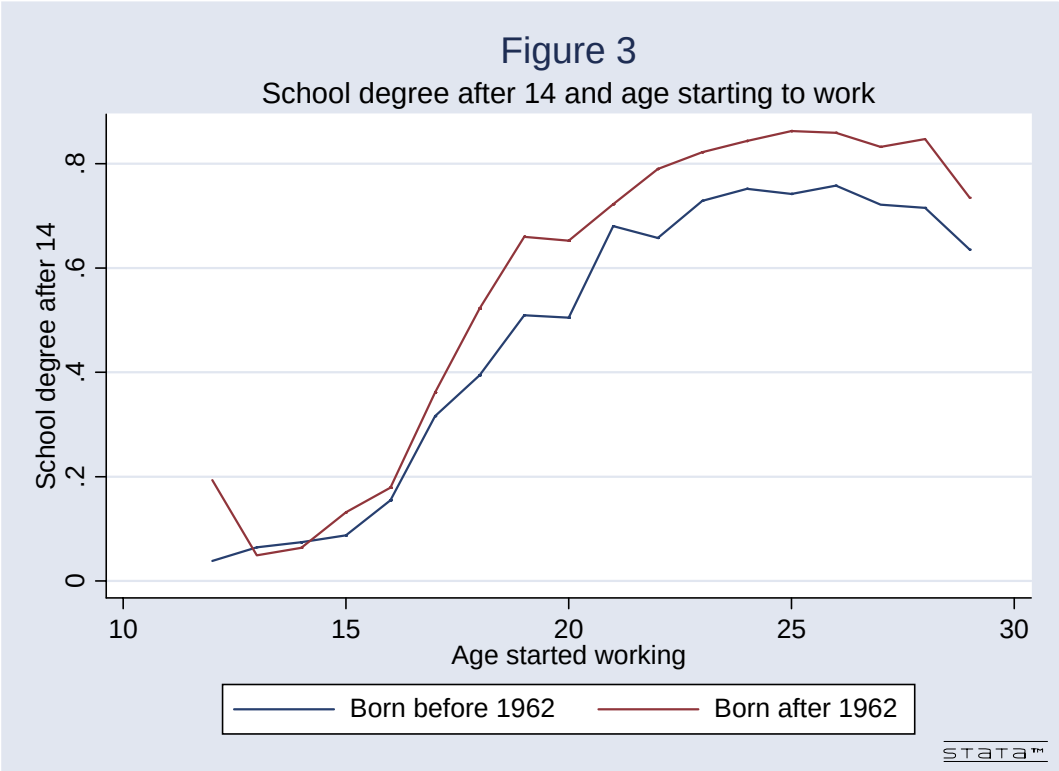


Figure 3
School degree after 14 and age starting to work
School degree after 14
0
.2
.4
.6
.8
10
15
20
25
30
Age started working
Born before 1962
Born after 1962
stata™

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