

AFRO BAROMETER

Working Paper No. 75

**EDUCATION AND SUPPORT FOR
DEMOCRACY IN SUB-SAHARAN
AFRICA: TESTING MECHANISMS OF
INFLUENCE**

by Geoffrey Evans and Pauline Rose

**A comparative series of national public
attitude surveys on democracy, markets
and civil society in Africa.**



The Institute for Democracy in South Africa (IDASA)
6 Spin Street, Church Square
Cape Town 8001, South Africa
27 21 461 2559 • fax: 27 21 461 2589
Mattes (bob@idasact.org.za)

Ghana Centre for Democratic Development (CDD-Ghana)
14 West Airport Residential Area
P.O. Box 404, Legon-Accra, Ghana
233 21 776 142 • fax: 233 21 763 028
Gyimah-Boadi (cdi@ghana.com)

Michigan State University (MSU)
Department of Political Science
East Lansing, Michigan 48824
517 353 3377 • fax: 517 432 1091
Bratton (mbratton@msu.edu)

afrobarometer.org

AFROBAROMETER WORKING PAPERS

Working Paper No. 75

**EDUCATION AND SUPPORT FOR
DEMOCRACY IN SUB-SAHARAN
AFRICA: TESTING MECHANISMS
OF INFLUENCE**

by Geoffrey Evans and Pauline Rose

November 2007

Geoffrey Evans is Professor in the Sociology of Politics, Director of the Centre for Research Methods in the Social Sciences, Official Fellow, Nuffield College.

Pauline Rose is Senior Lecturer in International Education at the Centre for International Education at Sussex School of Education.

AFROBAROMETER WORKING PAPERS

Editors: Michael Bratton, E. Gyimah-Boadi, and Robert Mattes

Managing Editor: Carolyn Logan

Afrobarometer publications report the results of national sample surveys on the attitudes of citizens in selected African countries towards democracy, markets, civil society, and other aspects of development. The Afrobarometer is a collaborative enterprise of Michigan State University (MSU), the Institute for Democracy in South Africa (IDASA), and the Centre for Democratic Development (CDD, Ghana). Afrobarometer papers are simultaneously co-published by these partner institutions and the Globalbarometer.

Working Papers and Briefings Papers can be downloaded in Adobe Acrobat format from www.afrobarometer.org.

Printed copies of Working Papers are available for \$15.00 each plus applicable tax, shipping and handling charges. Orders may be directed to:

IDASA POS
6 Spin Street, Church Square
Cape Town 8001 SOUTH AFRICA
(phone: 27 21 461 5229, fax: 27 21 461 2589, e-mail:msibanyoni@idasa.org.za)

An invoice will be sent



Idasa



co-published with:

GLOBALBAROMETER™

Education and Support for Democracy in Sub-Saharan Africa: Testing Mechanisms of Influence

Abstract

Discussions of the social factors conducive to the emergence and survival of liberal democratic regimes in developing societies have generally emphasized modernization as a positive influence and more recently, certain religious traditions as negative influences. Within the modernization framework however recent decades have seen a move away from according education a central role in modernization accounts in favor of a focus on education as a marker of more purely economic, resource-based sources of political values. Typically, however, these discussions have included little systematic evidence on the micro-foundations of democratic commitment, drawing inferences from macro-level patterns and trends. In this paper we propose to investigate empirically the factors that influence individual variations in democratic attitudes in 18 African societies, paying particular attention to the role of education as an influence on the endorsement of democracy and rejection of alternatives to democracy and how this influence can be explained. We demonstrate that educational level is the dominant social structural factor conditioning support for democracy, far outstripping others that have typically been attributed important roles in modernization theories, and religion is of little consequence. We further demonstrate that the mechanisms through which schooling influences democratic support relate to cognitive elements of political comprehension and involvement that are consistent with an intrinsic model of the effect of education on democratic values and outcomes rather than a view of education as a marker of resource inequalities.

INTRODUCTION

The debate over the ‘social requisites of democracy’, to use Lipset’s (1959) iconic phrase, has been central to discussions of democratization at both macro- and micro-levels for half a century. Yet the role of education as a social requisite remains unresolved. At the macro-level it appears that level of education and democracy are positively related, but it is not yet established whether this relationship is independent of the effects of economic development. Even in the most recent empirical disputes, some authors claim the impact of education on democracy is independent and important (Glaeser *et al.* 2005) while others say that it can be explained by economic factors such as increases in GDP and equality (Boix and Stokes 2003), that education is significant but not as important as economic factors (Barro 1999; Przeworski *et al.* 2000) or even that neither economic nor educational factors are causally related to the presence of democracy (Acemoglu *et al.* 2006). At the micro-level, in contrast, though there have been many theoretical accounts of the role of modernization on democratic values there has been far less emphasis on an empirical analysis of the relative importance of education versus other economic and social factors in developing societies. Some of the earlier literature on modernization certainly attributed an important role to education: It was a key factor in Lipset’s (1959) thesis of the social pre-requisites of democracy, while Almond and Verba (1963) treated education as a major source of civic attitudes and support for democracy.¹ Nonetheless, discussions of modernization including those by Lipset himself (1959; 1994), typically bundle together a range of influences – urbanization, industrialization, the growth of the middle class, education, affluence etc - without attributing any causal priority amongst them: “industrialization, urbanization, wealth and education are so closely interrelated to form one common factor” (Lipset 1959: 80). So although influential proponents of modernization theory have argued that education is important in promoting democratic values and thus facilitating the adoption and preservation of democratic practices in developing societies the empirical evidence for its distinctive causal role is surprisingly thin.

In this paper our central focus is, precisely, the importance of education for democratic attitudes and how this can be explained. Our thesis is that by improving cognitive and communicative skills education can increase civic involvement and support for democratic practices in developing societies to a greater degree than any other social structural factor. To test this idea so we examine the importance of education compared with occupation, economic resources, urbanization and, as a possible counter influence, certain religious orientations. In this sense we return to the tradition in the study of democratization that placed considerable emphasis on education as a facilitator of mass support for democracy (see especially Inkeles 1983), but bring to bear detailed evidence on these effects and how they are explained.

Part of our motivation in developing and evaluating this thesis derives from our belief that schooling is an area where interventions by international agencies can and have been made and it is important therefore to clarify its putative role in the process of mass endorsement of democratic procedures. Though it has been assumed that: ‘Broad and equitable access to education is thus essential for sustained progress toward democracy, civic participation, and better governance (World Bank, 2001: 8), as yet there has been little systematic research evidence to support such claims in developing country contexts, particularly in sub-Saharan Africa (Hannum and Buchmann, 2005).

In the rest of the paper we build upon the approach adopted in our study of support for democracy in Malawi (Evans and Rose, 2007), we expand the approach to include a comparative design using the recently conducted third round of the Afrobarometer survey which provides a broad range of sub-Saharan African countries with varying social and institutional legacies, including levels of educational provision. In many of these countries there have been long periods of one-party/man rule and where the introduction of democracy has in part at least been externally-driven, support for democracy is likely to have fragile foundations (Bratton and van de Walle, 1997). The context is thus one where there is considerable scope for increases in educational provision and such increases could make a difference to levels of mass support for democracy and in turn to the stability of such

¹ Normative accounts have also emphasized the importance of education for democratic citizenship (Gutmann 1987; Kamens 1988).

democracy. We proceed to estimate general patterns of educational influence on support for democracy and then estimate models that test competing arguments that explain these effects. To preview our conclusions, we demonstrate that education far outweighs all other ‘modernization’ influences on democratic attitudes. We also show that religion has little or no impact on such attitudes and thus confirm that, contrary to the belief of some commentators, Islam does not in this context provide a factor inhibiting the holding of pro-democratic attitudes.² As with our previous work we find evidence of variations in the impact of primary and higher levels of education on different aspects of democratic support. In this paper, we further examine how education’s effects might be understood by identifying and testing potential mechanisms through which education might influence democratic support.

APPROACHES TO EXPLAINING DEMOCRACY IN DEVELOPING CONTEXTS

Modernization And Education In Sub-Saharan Africa

Modernization theories link mass educational expansion and rises in literacy levels with democratic outcomes.³ At the micro-level, schooling intends to contribute to the acquisition of skills and knowledge, and thus contribute to human capital formation. This is anticipated to alter the political attitudes and values of young people. Heightened political awareness via mass media consumption leads to demands for greater political involvement – what Inkeles and Smith (1974) referred to as the inculcation of a more ‘modern’ outlook, stressing participation in decision-making. Through this process education strengthens democratic practices and principles and “(m)odern schooling constitutes an important mechanism for the introduction and consolidation of democratic political regimes” (Benavot 1996: 384). None the less, though there is considerable evidence on the positive relationship between education and support for democracy in developed countries with considerable experience of democracy, there has been little or no evidence that establishes whether in developing societies education is the prime-mover or just one of a complex set of conditions facilitating democratic orientations. Most empirical studies of education and its impact on individuals’ cognitive skills, political values and participation have been undertaken in the US or other ‘Western’ societies (Hyman and Wright, 1979; Bobo and Licari, 1989; Nie, Junn and Stehlik-Barry, 1996; Sullivan and Transue, 1999). Evidence of this relationship has also emerged from transition societies in Eastern Europe (Gibson, Duch and Tedin, 1992; Miller *et al.*, 1994; Reisinger *et al.*, 1994; Evans, 1995; Diamond, 1999; Rose, Mishler and Haerpfer, 1999). However, in both of these contexts, universal secondary education has been, or is close to being, achieved and the focus of research tends to be on the influence of intermediate and higher levels of education on popular support for democratic transition.

Inferences derived from these studies are not easily transferable to countries where not only is democracy a relatively recent phenomenon, and where the education of most of those of voting age has taken place in non-democratic contexts, but also many pupils do not proceed beyond primary schooling. Most of the countries included in the Afrobarometer survey are only regarded to have achieved the status of being democratic since the 1990s. Moreover, Bratton and van de Walle (1994) discuss the distinctive nature of African politics, which they identify in terms of different varieties of ‘neopatrimonialism’ – ‘where the chief executive maintains authority through personal patronage, rather than through ideology or law’ (p458), with the right to rule ascribed to the person rather than the office. As they note, the personalization of power is likely to have implications for the dynamics of political transition. Their analysis, undertaken at a relatively early stage of the transition for many

² A separate question, which we are investigating in accompanying work, is whether being Islamic weakens the liberalizing influence of education.

³ Though elite perspectives on education (i.e. Benavot 1996), argue that it is the political impact of educational elites who become responsible for creating and running political institutions that strengthens democracy. From this approach it is likely to be the size of higher educational sectors in different countries that contribute to differences in democratic outcomes.

sub-Saharan African countries, indicated that institutional characteristics of pre-existing political regimes are more important for the dynamics of political transition than structures of economic and social modernity (p.484-5).

There has also been little change in economic development in the sub-Saharan African region over the past decade, with real GDP per capita reaching around \$600 per capita in 2004. Van de Walle (2002) notes that, given the lack of variation in economic development on the continent, there is no clear pattern in sub-Saharan Africa of a relationship between more democratic countries and levels of economic development which, he suggests, is not supportive of modernization theory but rather of the view that transition to democracy can occur at any level of development. Whether the transition, under conditions of low economic development and given the particular features identified as being associated with African democracy, can result in sustained and consolidated democracy in a true sense continues to deserve further attention. Understanding the conditions under which citizens are most likely to be supportive of democracy is an important aspect of this.

The role that education plays in the sub-Saharan African context deserves particular attention where, according to World Bank data, those in secondary school are around 30% of the school-aged population, with 6% at the tertiary level. This compares unfavorably with global averages of 66% and 25%, respectively (World Bank, 2007). Low levels of education are reflected in the Afrobarometer survey, where only 40% of the sample has had access to post-primary schooling. Furthermore, it has been argued that, in sub-Saharan African countries, not only has explicit teaching for democratic knowledge been weak, but the style of teaching has tended not to encourage critical thinking or participation, in ways that might be considered necessary to promote values associated with a democratic political culture (Harber, 2002). Authoritarian approaches to teaching and learning have continued since the introduction of democracy, in contexts where education itself has played an important role in the democratic process. With abolition of primary school fees high on the agenda of political parties during election campaigns, the resultant massive increase in primary school enrolment has given rise to concerns for the quality of education with particular challenges for teaching in classes of over 100 pupils, and so raising questions of what children are learning in school (Kadzamira and Rose, 2003, Stasavage, 2005a). Under these conditions, support for democracy could occur *despite* formal schooling, rather than because of it.

Given the lack of evidence in this context, there has been considerable attention to the promulgation of 'civic education' training consistent with the assumption derived from evidence from other parts of the world that the content of education is consequential for commitment to democratic practices and values (e.g. Finkel, 2003). The aim of this has been, more or less explicitly, to teach people how to support democracy as a political practice to understand what democracy is, and to participate in the democratic process. These programs can occur through schooling, or adult education programs (see, for example, Bratton and Alderfer, 1999).

Commentators note that democratic transition has taken place in many sub-Saharan African countries particularly since the 1990s both as a result of internal struggle and international pressure (Bratton and van de Walle, 1994; van de Walle, 2003; Bratton *et al.*, 2005). Similarly, education programs designed to promote the consolidation of democracy have often been undertaken with the financial support of international agencies. For example, concern for strengthening democracy has been central to USAID's mission from its outset (see Valverde, 1999).⁴ This focus is clearly evident in USAID's 2005 Education Strategy which includes a quote from President George W. Bush as an opening statement: 'Education is the foundation of democracy and development – in every culture, on every continent' (cited in USAID, 2005: 1). The strategy paper later cites Barro (1999) to stress that 'Education is a powerful tool to promote support for democracy and enhance civil liberties' (USAID, 2005: 3). While the mantra of the World Bank currently is very much associated with political concerns in relation to fighting corruption, given its mandate its focus for this has remained from the perspective of supporting economic development. As such, it has not been as directly involved in programmes to promote democracy. This is reflected in its education strategies (1994, 1999, 2006)

⁴ Valverde (1999) also notes that researchers have 'determined that education has played an important role in the rise of democracy in this region [Latin America]'

which make only passing reference to the role of education in supporting democracy (as also indicated in the quote above), with the organisation's main concern in the political arena related to improving the governance of the education sector to ensure accountability and so improve service delivery.

Despite the emphasis placed on supporting education programs in the quest for strengthening democratic support, there is extremely limited evidence on this relationship. An important exception is the major study by Bratton, Mattes and Gyimah-Boadi (2005). Their research covers a broad set of issues, with education being just one of many factors considered in their analyses. Moreover, their study covers many issues relating to political and economic reforms, with the nature of influences on support for democracy only one amongst these. They nevertheless (2005: 205) find that although educated Africans are more sceptical about the quality of democracy that is delivered, 'education induces support for democracy, and it does so mainly at the expense of attachment to non-democratic alternatives'.⁵ More weight is placed, however, on other factors: 'awareness of the meaning of democracy and knowledge of leaders have greater impact on democratic commitments than formal education' (p. 219), and in their most comprehensive set of analyses based on structural equation models 'education has no direct effects on any reform attitude' though it does have 'hefty indirect effects' (p. 291). The authors take this to indicate that 'a person's general level of schooling is less immediately relevant to learning deep democratic commitments than his or her specific awareness of public affairs.' (p.291). But of course, one can argue that the provision of education plays a key role in facilitating such awareness *via* its implications for literacy and the ability to comprehend democratic politics. By paying closer attention to the role of schooling amongst the social conditions that facilitate democracy we hope to refine understanding of how this process works by elucidating the impact of education on such mechanisms.

Cognitive Enhancement Or Proxy For Resources?

As part of this elucidation of how education works, we need to evaluate a recent challenge to the cognitive interpretation of why education predicts democratic attitudes. In contrast to the notion of cognitive mechanisms involving awareness and comprehension and values, this approach is a resource-based model in which education's intrinsic significance is given less weight than its role as *a marker for social inequalities*. Thus Nie *et al.* (1996: 47) argue that education serves two different functions: on the one hand, it enhances the development of individuals' cognitive capabilities. On the other, it works as a social stratification mechanism. It operates, then, through two separate causal mechanisms: one of a cognitive nature, developing skills at the individual level, and the other of a positional character, allocating citizens to different positions in a social hierarchy.

Indeed, it has long been suggested that 'not all schooling is education. Much of it is mere qualification-earning' via examination-oriented systems which, while they may send comforting signals to employers, are not orientated towards encouraging 'imagination, creativity, honesty, curiosity and the determination to get to the of bottom things' (Dore, 1976: 11-12). It has been further argued that education is an arena for the reproduction of social inequalities - schooling itself can contribute towards the reproduction of, for example, class and gender differentials. For Bowles and Gintis (1976), the school is analogous to a mini factory in which the social relations of dominance, hierarchy, respect for authority, punctuality, etc. are replicated, in order to socialize future workers into accepting positions they are expected to occupy later in life. This understanding of some of the social functions of schooling runs counter to the expectation / assumption in much of the more conventional education literature that schooling is an effective instrument for the generation of human capital through skills acquisition that enhances productivity.

A related view is advanced by Inglehart and Welzel (2005: 37-38; see also Abramson and Inglehart, 1995) with particular reference to the relationship between education and political values. They claim

⁵ In their earlier work the authors are skeptical of the positive effects of education on support for democracy: 'Unlike in the West...education does not build support for democracy in Africa...Indeed, the very highly educated in Africa seem to have qualms about democracy precisely because they fear it endows illiterate citizens with political rights that may be exercised unreflectively or irresponsibly' (Bratton and Mattes, 2001: 117).

that contrary to arguments that “education drives the modernization process... This emphasis on cognitive forces captures an important part of the story but only part. Experiential factors, such as whether people feel that survival is secure or insecure, are at least equally important in shaping people’s world views... A society’s prevailing sense of existential security is more important than cognitive factors”. Education’s importance to a large degree derives from the fact that “Throughout the world, children from economically secure families are more likely to obtain higher education” (Inglehart and Welzel 2005: 37). This interpretation of education as a marker rather than a cause has been subject to criticism (Duch and Taylor 1993, 1994; De Graaf and Evans 1996) but is a potentially important perspective from which to assess the importance or otherwise of schooling for political values. It implies to a substantial degree, that education’s ‘effects’ are spurious.

Specifying Hypotheses

Our argument is that the effects of education on influencing democratic attitudes are more important than has hitherto been recognized in many generalized discussions of modernization. We therefore predict strong and general effects of level of schooling that are not removed by controlling for possible confounds such as religion, age, gender, or even partisanship. We also predict that because of its particularly pronounced impact on cognitive skills, the effects of education should be considerably stronger than and should dominate those of other aspects of modernization, such as social class and urbanization. In contrast, the generic version of modernization theory predicts that a range of indicators – such as urbanization, the growth of the middle class, affluence and access to media – would have substantial effects on support for democracy. In this account education would not be privileged.

Hypothesis Ia: education has strong effects that are robust to the inclusion of standard controls

Hypothesis Ib: education has stronger effects than other indicators of modernization (social class, urbanization)

Hypothesis II: other indicators of modernization have effects that are comparable to those of education

We also argue that education’s effects can be understood as working through intrinsic features of the educational process, in that education’s effects are cognitive in nature, facilitating the awareness and comprehension of political choices. In contrast, the ‘education as marker’ argument argues that even where education predicts political values its effects are not derived as much from its impact on cognitive factors as through its status as a proxy for resource inequalities. If this approach is valid we would expect that controlling for differences in resources that are associated with educational level should substantially reduce the strength of the effect of education on support for democracy. This reduction should be substantially greater than that obtained by controlling for education’s effects on awareness and comprehension. If, however, our emphasis on the cognitive interpretation of education’s effects is valid we predict that controlling for differences in resources associated empirically with level of education should not substantially reduce the coefficients for level of schooling on support for democracy.

Hypothesis III: controlling for resource inequalities does not substantially weaken education’s effects

Hypothesis IVa: controlling for resource inequalities substantially weakens education’s effects

Hypothesis IVb: resource inequalities have stronger effects than education

If education survives this test it can be taken as relatively indirect evidence in favor of the intrinsic interpretation of education’s effects - a null finding for the thesis that education is a marker for resource-inequalities is not in itself convincing evidence of the role of political awareness and comprehension. We therefore test the interpretation directly by introducing measures of political involvement and political comprehension into our models. The inclusion of measures of respondents’ understanding of democracy and the political system provides a direct test of the cognitive

mechanisms specified in the intrinsic model. If the cognitive model is valid these should account for education's effect by substantially attenuating the coefficients for levels of schooling. Moreover, because resource inequalities are less cognitive in their impact, controlling for comprehension should have less of an impact on those effects.

Hypothesis Va: controlling for media consumption and political involvement substantially weakens education's effects

Hypothesis Vb: controlling for political comprehension substantially weakens education's effects.

DATA AND MEASUREMENT

The Afrobarometer surveys are the most comprehensive surveys of their kind undertaken in the African context. The 2005 third wave of the Afrobarometer survey used here is composed of 18 nationally representative, multi-stage cluster, stratified random sample of households producing interviews with 1200-2400 eligible voters, 18 years and older in each country. In the data analyzed we use the weighted data which sets all country samples to 1200.⁶

Measuring Democratic Attitudes

The sets of questions about democracy included in this wave of the Afrobarometer allow us examine support for democracy using not only a question which establishes whether a person considers democracy always to be the best form of government but also further questions identifying those who reject alternative regimes – including one-party 'democracy', military control, and presidential autocracy (see Bratton and Mattes, 2001b, p. 457).

Support for democracy. Although a sizable minority of sub-Saharan Africans in the sample considers that, in some circumstances, a non-democratic government can be preferable or that it makes no difference, there is substantial agreement with the statement that democracy is preferable to any other form of government (67% of the sample). For the analysis we have aggregated response categories other than support as there is no clear ordering between them in terms of level of expressed level of support.

Rejection of non-democratic alternatives. We follow-up on this question by examining responses to several questions that probe respondents approval of decision-making procedures associated with democracy. The phrasing of these questions deliberately avoids the use of word 'democracy' and, in the survey, preceded the above question in relation to support for democracy. This allows a more nuanced assessment of whether, instead, respondents reject practices inconsistent with a democratic system. The variable used in the analysis aggregates responses that indicate clear rejection of three key alternatives to democracy: army, presidential and one-party rule. It therefore produces a scale ranging from 0, where none of these are rejected, to three, where all are. This measure provides greater differentiation in responses, with 9.6% of the sample not rejecting any of the alternatives, 12.5% rejecting one of the alternatives, 25.2% rejecting two of the alternatives, and 52.8% rejecting all three.

Measuring Education

Educational attainment is conventionally measured in studies of this kind by years of schooling (Smith 1995). However, the comparative study of education has increasingly moved away from relying on years of education as a measure of educational attainment (Braun and Müller (1997). Breen and Jonsson (2005) point to the problems of neglecting the conception that most actors have of education as a series of transitions between levels. Thus in continuous metric regression models, variation in the coefficients resulting from one unit changes in the independent variable do not correspond with a real qualitative difference in the educational credentials of the individual, since the latter are primarily a result of levels and transitions completed. The continuous metric of the years of

⁶ See www.afrobarometer.org for further information on the sample design.

schooling variable imposes a linear form on changes that occur only at specific points in an educational trajectory. Bratton, Mattes and Gyimah-Boadi's (2005) multivariate analyses using the Afrobarometer survey go some way to dealing with this problem by using relevant institutional transitions (no formal education, primary, secondary and post-secondary education) as the measure of education but these are modeled as a 4-point, scaled variable – perhaps unsurprisingly given that education is not a central focus of their work. Inevitably, however, this modeling procedure obscures non-linear effects, constrains different one unit changes to be equivalent and does not provide information on the specific effects of different schooling levels - the consequences of the provision of which is of particular concern to national governments and international agencies. In our analysis, therefore, the effects of respondents' education are estimated by comparing the effects of five levels of attainment: incomplete primary (21.0%), completed primary (16.3%), secondary (33.1%), and post-secondary (8.9%) with no formal education (20.7% of the sample).⁷ This enables us to focus on the distinctive consequences of these different levels of educational experience.

OTHER VARIABLES

Controls

The choice of control variables is guided by theoretical considerations and the findings of previous research. Our aim is to include those socio-demographic attributes that could, independently of educational level, cause citizens to have a more or less supportive attitude towards democracy. These attributes are in part those identified in modernization accounts of democratic development and also those that have been proposed more specifically in sub-Saharan Africa.

Firstly, we might expect that there could be a generational and gender influence on support for democracy. Younger people who have more experience of democracy and exposure to democratic propaganda, and have grown up in an era when democracy is more commonplace, might be expected to be more supportive. In addition, given that women in the region tend to continue to play traditional roles while men have greater spatial and occupational mobility, males could be anticipated to benefit more from the modernizing influences of democracy and therefore be more supportive.

We can also expect there to be a relationship between age, sex and educational level, which is indeed the case. For example, amongst respondents aged above 45, only 6.1% have had post-primary education. However, amongst those 25-34 this figure rises to 11.3%.⁸ Conversely, amongst those 25-34, only 15.5% report no education at all, whereas this figure is 35.9% for those aged over 45. It is also true that males are considerably more likely to have received post-primary education (10.7% for males, compared with 7.0% for females).

We also consider whether respondents are part of the dominant language group in their country. Minorities can be expected to have greater concerns about representation in democracies compared with majority language speakers. Support for the ruling party/president is also likely to be associated with satisfaction with levels of political representation and, therefore, more support for democracy as a form of decision-making.

Finally, it is difficult to discuss the social factors conditioning support for democracy in developing societies without taking note of the other recent influential approach concerning the inhibiting influence of, specifically, Islamic religion on the emergence of such preferences. When Huntington (1996) influentially pronounced upon 'the clash of civilizations' and the supposed incompatibility between Islam and democracy he generated considerable fervor among commentators. Recent empirical literature produces divided opinions on whether being a Muslim/living in a Muslim country influences support for democracy. Most studies look at the country/regional rather than individual

⁷ The dataset also contains a response category referring to informal education, we estimated models with 'informal education' distinguished from 'no education' but found no significance differences.

⁸ The proportion of those aged 18-25 with post-primary education is lower (8.4%), probably because some of this age group are still in secondary school (half of this age group have achieved this level of education).

level, with very little research into the consequences of being a Muslim in sub-Saharan Africa.⁹ The major exception is Bratton's (2003) study using the Afrobarometer in which finds that Muslims are generally not less supportive of democracy and the more frequently Muslims attend a mosque, the more likely they are to support democracy (2003; see also Tessler 2002 for individual level evidence from Arab states). Where there is 'any hesitancy about supporting democracy among the African Muslims we interviewed [it] is due more to deficits of formal education and other attributes of modernization than to the influence of religious attachments' (p494). As he notes, "Muslims in Africa, especially females, have enjoyed limited opportunities to go to school...Perhaps therefore the few small differences we have observed between Muslims and non-Muslims are due to a lack of formal education – or a deficit of other modern attributes – rather than the influence of Islamic values" (2003: 500-1).¹⁰ Following Bratton we would therefore expect that with education included in our models, Muslims should be no less supportive of democracy than Christians or other religious groups.

As controls, we thus include indicators of age, sex, party support, language group, religion, and frequency of religious service attendance (a scale from never (1) to more than once a week (6)). See Table 1 for frequency distributions, and Table 2 for the pattern of these variables by level of education.

⁹ Thus Norris and Inglehart's (2004) study is at a societal level 'based on the assumption that predominant cultures exert a broad and diffuse influence upon all people living under them' (2004: 139). Their evidence suggests that Muslim societies have very similar political values with respect to attitudes towards democracy, although there is some difference in attitudes towards the role of religious leaders in politics. The main difference between Islamic societies and the West is found to be related to specific cultural values – gender equality and sexual liberalization. Surprisingly, however, given their focus on modernization vs religion, Inglehart and Norris say little about the role of education in these differences.

¹⁰ In this analysis we have not examined context effects such as the proportion of the population which is Muslim. It could be hypothesized that where Muslims are in the minority their interests in democracy are less likely to be represented and their support is weakened for instrumental reasons (see Bratton and Mattes 2001). Alternatively, it could be hypothesized that where Muslims are in the majority, Islamic values will be dominant and mitigate against democracy as the preferred political system. These are tested in a separate study.

Table 1 Descriptive Statistics For Independent Variables

Variable	Coding	Range	Mean	Standard
Gender	Male (0); Female (1)	0-1	.50	.500
Language group	Other (0); Majority (1)	0-1	.50	.500
Religious service attendance	Never (1) to more than once a	1-6	4.16	1.633
Party support	Other (0); Ruling (1)	0-1	.40	.489
Residence	Rural (0); Urban (1)	0-1	.65	.476
Gone without food in the	From never (0) to always (4)	0-4	1.14	1.264
Gone without water	From never (0) to always (4)	0-4	1.16	1.389
Gone without cooking fuel	From never (0) to always (4)	0-4	.917	1.221
Radio	From never (0) to every day (4)	0-4	3.09	1.320
TV	From never (0) to every day (4)	0-4	1.67	1.730
Newspaper	From never (0) to every day (4)	0-4	1.12	1.444
Interest in politics	Other (0) very interested (1)	0-1	.377	.4889
Understand democracy	No/don't know (0) Yes (1)	0-1	.26	.436
Knowledge of politics	See text	0-6	2.48	1.689

		No.	%
Education	No education*	4321	20.7
	Some primary	4390	21.0
	Primary completed	3417	16.3
	Secondary	6925	33.1
	Post-secondary	1852	8.9
Age	18-24	5595	26.8
	25-34	5993	28.7
	35-44	4057	19.4
	45 and above*	5259	25.2
Occupation	Non-manual*	2691	12.9
	Manual workers	5649	27.0
	Farmers	6794	32.5
	Other	5771	27.6
Religion	Christian*	14564	69.7
	Muslim	4094	19.6
	Other	2246	10.7
Discuss politics	Frequently	4794	22.9
	Sometimes	9428	45.1
	Never*	6683	32.0

* Reference group

N = 20,904

Indicators Of Modernization And Access To Resources

The presence of an urban population and a middle class of professional and managerial white collar workers is a key component of modernization theories of democratic development. These attributes can be expected to correlate with education and therefore provide possible alternative explanations for the relationship between education and support for democracy. In the sample, urban residence and occupation have a particularly strong relationship with education, as would be expected (Table 2).

Table 2: Relationships Between Education And Other Independent Variables

Table 2a	None	Some primary	Complete primary	Secondary	Post-secondary
Age					
18-24	11.4	16.5	14.1	49.7	8.4
25-34	15.5	18.8	18.3	36.1	11.3
35-44	21.4	22.1	19.3	27.8	9.4
45 and above	35.9	27.5	14.3	16.2	6.1
Language					
Majority language	20.9	23.3	14.8	33.6	7.4
Other	20.4	18.7	17.9	32.7	10.4
Gender					
Female	23.9	21.4	16.5	31.2	7.0
Male	17.5	20.6	16.2	35.0	10.7
Religion					
Muslim	47.9	17.0	11.1	18.1	6.0
Christian	12.0	22.1	18.5	37.5	9.9
Other	27.5	21.3	12.0	32.0	7.2
Party support					
Ruling party	16.3	22.5	20.3	33.2	7.7
Other	23.6	20.0	13.7	33.1	9.6
Occupation					
Non-manual workers	4.8	8.0	9.8	40.3	37.0
Manual workers	18.4	21.0	17.9	37.4	5.2
Farmers	30.6	29.9	20.6	17.5	1.4
Others	18.6	16.6	12.8	43.9	8.1
Residence					
Urban	12.8	14.0	13.1	43.3	16.8
Rural	24.8	24.7	18.0	27.7	4.7
Interest in politics					
Interested	18.6	20.1	17.7	32.9	10.8
Other	21.9	21.6	15.5	33.3	7.7
Understand democracy					
Yes	17.1	18.5	15.0	37.9	11.5
No	31.1	28.3	20.3	19.1	1.3
Discuss politics					
Frequently	15.9	17.5	18.6	35.3	12.7
Sometimes	17.9	20.0	15.7	36.2	10.2
Never	28.0	25.0	15.6	27.2	4.6

Table 2b	Pearson's R
Religious service attendance	.086**
Gone without food	-.196**
Gone without water	-.148**
Gone without cooking fuel	-.123**
Frequency of radio consumption	.215**
Frequency of Newspaper consumption	.488**
Frequency of TV consumption	.369**
Political knowledge	.343**

Given that in countries in sub-Saharan Africa Western-based class distinctions do not necessarily identify inequalities in the distribution of resources, we also employ alternative resource indicators namely access to water, cooking fuel and basic sustenance. For example, of those who report always going without food, 4.6% have post-primary schooling, compared with 32.9% of those who report always experiencing deficiencies.

Our next set of measures index respondent characteristics that are likely to be highly influenced by level of education, including media consumption and political comprehension, and which can mediate education's effects by providing mechanisms through which education affects democratic attitudes.

Political Involvement

We include three variables associated with frequency of media consumption – including radio, television and newspapers. Each of these is presented on a five-point scale, ranging from never to every day. These are included separately as they are seen to have different characteristics, with access in part influenced by supply-side constraints. Radio access is commonplace in both urban and rural communities in sub-Saharan Africa with as many as one in four people having a radio and others having access through group listening. Access to TV is less prevalent, with an estimated 1 in 14 having access to a television set (UN ICT Task Force, 2002). The distribution of newspaper is unlikely to reach many non-urban areas so again is less accessible and as a regular purchase requires disposable income. Importantly, access to information from newspapers requires individual's to be literate. In this sense radio is more accessible and less resource dependent as a source of political information. To the degree that radio usage mediates the effects of education we therefore attribute it to the involving function of education rather than an associated resource inequality.

Associated with the use of media is the extent of citizens' involvement in politics. This is measured firstly, by whether respondents indicate that they are very interested in politics and, secondly, how frequently they discuss political issues (frequently, occasionally or never).

Comprehension Of Politics

Finally, we are interested in the influence of comprehension of politics, measured in two ways:

Understanding of democracy: This question was asked in the survey in English in the first instance, and then translated into indigenous languages where the respondent did not understand initially. The effects of providing an explanation of democracy in English or indigenous language are similar. We therefore treat those respondents who said they knew what democracy meant but then said 'don't know' on probing as providing a negative response.

Political knowledge: An indicator of political knowledge is constructed through aggregating whether respondents give correct answers to six questions: their MP, local government councilor, the Deputy President, the political party with the most seats, and the length of Presidential term limits. This creates a scale of zero (incorrect answers to all questions) to six.

Analysis

Preliminary analysis indicates there is an association between educational level and preference for democracy and rejection of non-democratic alternatives across the region. This pro-democratic endorsement increases monotonically across different levels of schooling and is found in all countries in our dataset. None of the 360 (2 dependent variables x 18 countries x 10 comparisons between categories of education) combinations of observed relationships between levels of education and the two indicators of pro-democratic attitudes indicate a significant negative shift corresponding with a higher level of education. Our primary interest therefore is in the general patterns of association for

the 18 countries as a whole. For this analysis we use fixed effects models that control for differences in levels of all variables between countries.¹¹

Preference For Democracy

Table 3 presents the analysis of support for democracy. We start by estimating the effect of levels of schooling on support for democracy in model 1. These indicate that each stage of schooling contributes a highly significant increment to democratic support. The patterns of effects is broadly linear, with each level of schooling significantly more positive than the one before, including ‘some primary’, which has a substantial and significant impact relative to no education.

In model 2 we introduce socio-demographic and political attributes that could, independently of educational level, cause citizens to have a more or less supportive attitude towards democracy and which need to be controlled for a rigorous test of education’s effects. Several of these are significant in their impact on democratic support – ruling party supporters, men, majority language speakers, and Muslims are all more supportive than their reference categories. Young people are distinctive in their lack of support relative to all others. The gender effect is particularly substantial (see also Bratton, Mattes and Gyimah-Boadi, 2005: 183). Muslims, as Bratton (2003) found in some of his analyses are not less, but more likely to support democracy. Remarkably, however, the coefficients for levels of schooling remain untouched by the inclusion of these significant effects. Education is clearly more important than any other factor and is not affected their presence in the model.

¹¹ There is nonetheless cross-national variation in the angle of slopes and the cut-points at which jumps in support are observed which are being examined in a further paper modeling cross-national variation in the extent of education’s effects using hierarchical linear models that allow estimation of individual and country-level effects and interactions between these levels.

Table 3. Logit Models of Support for Democracy (country fixed effects)

		Model 1	Model 2	Model 3	Model 4	Model 5
Intercept		-.218** (.073)	.213* (.100)	.838** (.122)	.741** (.131)	-.189 (.145)
Education (ref. = Some primary)	Some primary	.341** (.048)	.333** (.049)	.281** (.049)	.212** (.050)	.030 (.056)
	Primary	.709** (.053)	.715** (.055)	.622** (.056)	.485** (.057)	.152* (.065)
	Secondary	1.167** (.047)	1.227** (.051)	1.060** (.054)	.850** (.056)	.273** (.063)
	Post-secondary	1.614** (.071)	1.620** (.074)	1.291** (.081)	.976** (.085)	.274** (.093)
Age (ref. = 45)	18-24	-	-.281** (.045)	-.258** (.047)	-.254** (.048)	-.067 (.053)
	25-34	-	-.066 (.044)	-.077 (.044)	-.082 (.045)	-.002 (.049)
	35-44	-	.030 (.047)	.018 (.047)	.003 (.048)	.026 (.053)
Gender	female	-	-.439** (.031)	-.438** (.032)	-.334** (.033)	-.080* (.037)
Language group	Majority language	-	.088* (.036)	.069 (.036)	.049 (.036)	-.037 (.040)
Religion (ref.=Christian)	Muslim	-	.199** (.058)	.172** (.058)	.162** (.059)	.178** (.065)
	Other	-	-.052 (.349)	-.034 (.056)	-.004 (.057)	.013 (.063)
Religious service attendance		-	.010 (.011)	.007 (.011)	-.001 (.011)	-.015 (.012)
Party support	Ruling party	-	.332** (.034)	.342** (.034)	.271** (.035)	.224** (.039)
Residence	Urban	-	-	.113** (.037)	.031 (.039)	-.007 (.043)
Occup. (ref.=nonmanual)	Manual	-	-	-.192** (.061)	-.139* (.061)	-.061 (.066)
	Farmers	-	-	-.402** (.062)	-.320** (.063)	.194** (.068)
	Other	-	-	-.338** (.062)	-.256** (.062)	-.163* (.067)
Gone without food		-	-	-.073** (.014)	-.049** (.014)	-.033* (.016)
Gone without water		-	-	.002 (.012)	.005 (.012)	.001 (.014)
Gone without cooking fuel		-	-	-.030* (.014)	-.030* (.014)	-.038* (.015)
Radio		-	-	-	.116** (.013)	.056** (.014)
TV		-	-	-	.032* (.013)	.018 (.014)
Newspaper		-	-	-	.046** (.015)	-.007 (.016)
Interest in politics	Very interested	-	-	-	.134** (.036)	.101* (.040)
Discuss politics	Frequently	-	-	-	.448** (.048)	.273** (.053)
	Occasionally	-	-	-	.024 (.044)	-.022 (.048)
Understand		-	-	-	-	2.278** (.045)
Knowledge of politics		-	-	-	-	.102** (.014)
<i>N.</i>		20,904	20,904	20,904	20,904	20,904

** significant at 1% * significant at 5%

So far we have presented evidence that suggests that the effects of schooling on democratic support appear substantial. In model 3 we introduce attributes identified in modernization accounts of democratic development (class, urban-rural residence) and also those that are useful indicators of resource deficiencies in the sub-Saharan African context (lack of food, water and cooking fuel). In line with expectations of modernization theory, urban residence and social class have a strong relationship with education, while the more specific resource indicators have moderate associations (see Table 2). We might expect education's effects to be substantially weakened by the inclusion of these other aspects of modernization theory (II) and resource indicators (IVa and IVb).

As expected, we find that urban, non-manual, adequately resourced respondents are more likely to support democracy than are those in rural areas, manual workers/farmers, and respondents with deficiencies of food and cooking fuel (though reporting having gone without water is not significant). Some of these effects – particularly those for class position – are reasonably strong and reach over six times the standard error for farmers relative to nonmanual workers). But these effects are dwarfed by those for education. The latter's coefficients show a modest decline once these other aspects of modernization and resources are included, but their magnitude is still of a different order to those observed for other independent variables in the analysis. Not only is education vastly more consequential than the other modernization or resource indicators, but it is not substantially weakened by their inclusion thus disconfirming hypotheses IVa and IVb.

So far we have not considered respondent characteristics such as media consumption or political comprehension, and which can be argued to mediate education's effects by providing mechanisms through which education works - so that to include them in our models would inappropriately obscure the influence of education *per se*. The first step in estimating these mediating effects is shown in model 4 in which we introduce indicators of media consumption and political interest and discussion. We can see that all of the media consumption measures, political discussion, and interest in politics have the predicted positive effects on democratic support. The effects of education are weakened, though they are still strong. There is some evidence here of mediation, but it is not overwhelming. Similar attenuation occurs for social class and gender.

The final model (5) includes the measures of democratic understanding and knowledge of politics. If cognitive arguments about education hold we would expect the inclusion of this measure to reduce heavily the size of the education parameters, whereas there is no reason for other indicators, such as class and resources, to be so strongly affected by this measure. As can be seen by comparing the education coefficients in models 3, 4 and 5, the effect of including understanding of democracy in the model is to massively reduce education's direct effects, thus giving support to hypothesis Vb. Political comprehension also substantially reduces gender effects and the difference between young people and others. At the same time, the coefficients for social class are moderately attenuated while those for resource deficiencies not at all. Perhaps unsurprisingly those who support the current governing party remain more likely to support democracy¹², as do Muslims.

Rejection Of Non-Democratic Alternatives

We employ the same modeling procedure with respect to our second dependent variable. In Table 4 we present the analysis of respondents' rejection of non-democratic alternatives to electoral democracy. As these responses form a four point scale we use OLS estimation rather than logit.¹³

¹² This is consistent with Bratton, Mattes and Gyimah-Boadi's analysis (2005: 259-60) which also shows that 'winners' are more likely to approve of the performance of incumbents, overlook corruption and support democracy. Moehler (2005) also finds that winners have higher levels of institutional trust and more positive assessments of the fairness of elections. For a more general set of findings and discussion of these commonly found patterns, see Anderson et al. (2005).

¹³ Recently, Ordered Probit has increasingly been adopted for analyzing such coarsely scaled dependent variables, but these models rarely fit and bring in further assumptions of their own. The advantage of OLS is its robustness to violations of its assumptions and general interpretability.

Table 4. Logit Models for Rejection of Alternatives to Democracy (country fixed effects)

		Model 1	Model 2	Model 3	Model 4	Model 5
Intercept		2.253** (.032)	2.331** (.042)	2.437** (.050)	2.422** (.053)	2.325** (.053)
Education (ref. = none)	Some primary	.151** (.020)	.140** (.020)	.119** (.020)	.095** (.020)	.055** (.020)
	Primary	.310** (.022)	.293** (.023)	.259** (.023)	.209** (.023)	.132** (.023)
	Secondary	.464** (.019)	.454** (.020)	.399** (.021)	.313** (.022)	.191** (.022)
	Post-secondary	.615** (.026)	.579** (.027)	.488** (.030)	.357** (.031)	.210** (.031)
Age (ref. = 45)	18-24	-	-.068** (.018)	-.060** (.019)	-.061** (.019)	-.018 (.019)
	25-34	-	.008 (.018)	.005 (.018)	.002 (.018)	.020 (.018)
	35-44	-	.001 (.019)	-.001 (.019)	-.007 (.019)	-.003 (.019)
Gender	female	-	-.148** (.013)	-.145** (.013)	-.107** (.013)	-.055** (.013)
Language group	Majority language	-	-.059** (.015)	-.067** (.015)	-.072** (.014)	-.086** (.014)
Religion(ref.=Christian)	Muslim	-	.018 (.022)	.008 (.022)	.008 (.022)	-.006 (.022)
	Other	-	-.026 (.023)	-.023 (.023)	-.011 (.023)	-.011 (.023)
Religious service attendance		-	.021** (.004)	.020** (.004)	.018** (.004)	.017** (.004)
Party support	Ruling party	-	-.012 (.014)	.017 (.014)	-.008 (.014)	-.031* (.014)
Residence	Urban	-	-	.096** (.015)	.052** (.016)	.054** (.016)
Occup.(ref.=nonmanual)	Manual	-	-	.017 (.023)	.039 (.023)	.057* (.022)
	Farmers	-	-	-.035 (.023)	.001 (.024)	.029 (.023)
	Other	-	-	-.053* (.023)	-.021 (.023)	.002 (.023)
Gone without food		-	-	-.019** (.006)	-.010* (.006)	-.008 (.006)
Gone without water		-	-	.004 (.005)	.005 (.005)	.005 (.005)
Gone without cooking fuel		-	-	-.022** (.006)	-.022** (.006)	-.022** (.006)
Radio		-	-	-	.019** (.005)	.005 (.005)
TV		-	-	-	.022** (.005)	.018** (.018)
Newspaper		-	-	-	.031** (.006)	.023** (.006)
Interest in politics	Very interested	-	-	-	.039** (.014)	.027* (.014)
Discuss politics	Frequently	-	-	-	.169** (.019)	.123** (.019)
	Occasionally	-	-	-	.015 (.017)	.004 (.017)
Understand democracy		-	-	-	-	.218** (.016)
Knowledge of politics		-	-	-	-	.065** (.005)
<i>N.</i>		20,904	20,904	20,904	20,904	20,904

** significant at 1% * significant at 5%

The first model again presents the effects of education alone. In this case, as in Table 3, we see a similar pattern to that observed for the support for democracy measure. Each extra level of completed education – primary, secondary, post-secondary – is consequential for respondents’ tendency to reject clearly alternative non-democratic forms of government when compared with no formal education. These strong, linear schooling effects are also of very similar magnitude, in terms of the ratio of coefficient to standard error, as are those for support for democracy.

Turning to model 2, which includes demographics and ruling party support, we again find no signs of attenuation: the education parameters remain clearly significant and of similar magnitude to model 1. Younger people are less likely to reject non-democratic alternatives; as are majority language speakers, and women. Those who attend religious services are more likely to do so. Interestingly, support for the ruling party/president and being Muslim does not increase rejection of non-democratic alternatives.

In model 3 we include class, urban residence, and resource deficiencies. There is some but only a very modest amount of attenuation of the education parameters. Less so perhaps than in the case of support for democracy. The significant effects for young people, majority language speakers, religious service attendance and gender, are unaffected.

Though urban residence has significant effects, social class has only a very weak effect, for farmers versus non-manual workers. Resource deficiencies with respect to food and cooking fuel have similar negative affects in model 3 in Table 3. In general, however, given the weaker level of attenuation of the effects of education than in model 3 in Table 3, this analysis provides even stronger confirmation of the dominance of education’s effects over other modernization variables and indicators of resource inequalities.

Model 4 introduces media consumption and political discussion/interest. These are again all significant and again noticeably attenuate all of the education parameters as in the equivalent model in Table 3. The effects of the other significant variables are not affected with exception, as before, of urban residence and food deprivation. In model 5, we see further, substantial attenuation of education parameters though not to quite the degree observed in Table 3 – the residual effects of schooling are significant at all levels including ‘some primary’. This more than likely relates to the less obvious link between understanding democracy and rejecting non-democratic alternatives, compared with the link between understanding and supporting the same concept (democracy) observed in model 5 in Table 3. It is noticeable that knowledge of politics and understanding of democracy each have similar effect magnitudes on this aspect of democratic attitudes, whereas the impact of the political comprehension measures on support for democracy was primarily accounted for by the understanding of democracy measure. The other significant effects from previous models are unchanged - language group and religious service attendance remain robust through all stages – with the exception of age and gender. Once again the youth effect is removed by political comprehension. There is also a sharp drop in the negative affect of being a woman once comprehension is controlled for, and the effect of food deprivation now falls just below significance.

The general message of the two sets of models is that schooling is by far the strongest social factor explaining democratic attitudes – whether measured as explicit support or the rejection of alternatives - and these effects increase in a linear form as levels of schooling attained increase. Other effects are not only weaker but less consistent across the two outcome measures of democratic attitudes. Gender is the strongest other influence – women are less pro-democratic in their attitudes – though, as with education; this difference is much attenuated by political comprehension in particular.¹⁴ Age has a very specific effect – being young is negatively associated with democratic support – and is again heavily attenuated by political comprehension.¹⁵ Religion, religious service attendance, ruling party/presidential support, language had effects on one or other of the outcome measures, but were not

¹⁴ The mechanisms that account for gender differences in support for democracy in sub-Saharan Africa are examined in other work by the authors.

¹⁵ Bratton, Mattes and Gyimah-Boadi (2005: 167) find that across African countries in the survey, those in the middle age group are most supportive of democracy. They interpret this as indicating that younger people are more blasé and older people more likely to cling to past models of governance.

consistent across both. Modernization indicators were generally relatively consistent in their effects - though social class was marginal for the non-democratic alternatives measure. However, these were far weaker than education, and did not seriously attenuate the impact of education. Political comprehension had a powerful effect as did, to a lesser degree, political involvement. These findings are consistent with our argument that education works through its impact on awareness and comprehension and not because it is a marker for resource inequalities.

Conclusions

Modernization is a process involving the interplay of various aspects of social change. Many discussions of its effects on social attitudes do not seek to specify what aspects are being emphasized and how these are measured. In this paper we have distinguished the various components of modernization and focused on the one factor that our results indicate really matters: education. Education dominates all other influences on democratic support, whether those of a modernization or other (e.g. religious) character. Level of schooling strongly predicts mass endorsement of democratic procedures as well as rejection of commonplace non-democratic alternatives.

These conclusions hold even though the estimation procedure we have adopted has provided a very demanding test of the robustness of education's effects, as it controls for many social factors that are associated with both education and attitudes towards democracy. These all provide different and competing socio-demographic bases of potential support for, or opposition to, democracy. Some of these factors, such as urban residence and sex, will have influenced the levels of education obtained by respondents while others, such as class position and resources, are likely to have resulted at least in part from having attained a certain level of education. The former set of influences may well influence attitudes to democracy in part through their influence upon the level of education obtained. Similarly, the latter set of influences will have in part been conditioned by prior education attainment, and may also partly reflect that formative experience. By controlling for the relationship between these confounding factors and education, we are doubtless under-estimating the contribution of education to the explanation of democratic attitudes. We can be confident, therefore, that the resulting estimates of education's effects are both conservative and highly robust.

In addition to these robustness tests however we have provided evidence of the mechanisms through which education's consequences can be understood. These findings have theoretical importance as they indicate that education's effects cannot simply be attributed to resource inequalities but are plausibly interpreted as cognitive and motivational attributed related to schooling itself. Thus schooling effects are in part mediated via mechanisms such as increased media consumption and, most substantially, via comprehension. This is so even though schooling for the vast majority of our respondents will have been undertaken in a non-democratic setting and without appropriate civic education. As a tool of intervention for the promotion of democratic cultures, education *per se*, would thus seem to represent a good investment - especially as it is effective, in part at least, even when provided at only relatively elementary levels: Primary schooling has a strong positive effect on support for democracy and the rejection of non-democratic alternatives. A positive effect, though somewhat weaker, is found even when primary schooling is only partly completed.

Almost half a century after Almond and Verba's path-breaking comparative analysis we can therefore confirm in a quite different context that "the uneducated man or the man with limited education is a different political actor from the man who has achieved a higher level of education." (Almond and Verba (1963: 315). This is not to imply that other experiences - such as of variations in the democratic process itself - are irrelevant (van de Walle, 2002). Even so, education is special in two ways. First, it is important because of the sheer magnitude of its effects compared with other potential indicators that have been highlighted in the literature as being influential, including social class or religion. Second, education is a key vehicle for external intervention in a region where democracies are not stable and where education is still not available to many, thus leaving considerable room for

growth in even relatively basic levels of provision.

Our results can thus be taken to suggest that the national governments and external agencies for whom democratic consolidation is a stated goal should focus on providing more children with the opportunity to experience formal schooling. The greatest aggregate gains in support for democracy are likely to be obtained by increasing the proportion of the population who complete primary education, which currently is still beyond the reach of the majority of children in sub-Saharan Africa. Nonetheless, both secondary and post-secondary education provide further substantial increments in endorsement of democracy and rejection of non-democratic alternatives. Though, inevitably, at the current time only a small proportion of the population of these societies are able to receive the benefit of post secondary education, the robust effects at the secondary education suggest large gains in mass democratic attitudes can also be made with further expansion at that level.¹⁶ And, if the positive effects of democracy on educational provision are taken into account (Stasavage 2005b), there is also the possibility of a virtuous cycle in which education can provide a basis of support for democracy which, in turn, can increase access to higher levels of education. This cycle can then further reinforce the social foundations of democratic practices in a region in which there remains a clear need for further consolidation of non-repressive and egalitarian government.

¹⁶ In further analyses we examine the possibility that the transition point at which education affects democratic support occurs at higher levels in more developed countries where larger proportions of the population receive secondary and tertiary education.

REFERENCES

- Abramson, P. and Inglehart, R. (1994). 'Education, Security, and Postmaterialism: A comment on Duch and Taylor's "postmaterialism and the economic condition"', *American Journal of Political Science* 38: 797-814.
- Abramson, P. R. and Inglehart, R.. (1995). *Value Change in Global Perspective*. Ann Arbor, Michigan: University of Michigan Press.
- Acemoglu, D., S., Johnson, J. Robinson, and P. Yared (2006). 'Income and democracy', MS Harvard.
- Almond, G.A. and S. Verba. 1963. *The Civic Culture: Political Attitudes and Democracy in Five Nations*. Princeton: Princeton University Press.
- Anderson, C. J., Blais, A., Bowler, S., Donovan, T., and Listhaug, O. (2005). *Loser's Consent: Elections and Democratic Legitimacy*. Oxford: Oxford University Press.
- Barro, R. (1999). The determinants of democracy', *Journal of Political Economy*, 107: S158-S183.
- Benavot, A. (1996). Education and political democratization: Cross-national and longitudinal findings. *Comparative Education Review*, 40 (4), 377-403.
- Bobo, L. and Licari, F.C. (1989). Education and political tolerance. *Public Opinion Quarterly*, 53, 285-308.
- Boix, C. and S. Stokes, (2003). 'Endogenous Democratization', *World Politics*, 55: 517-49.
- Bowles, S. and H. Gintis (1976). *Schooling in Capitalist America. Education Reform and the Realities of Economic Life*. London: Routledge and Kegan Paul.
- Bratton, M. (2003). 'Briefing: Islam, Democracy, and Public Opinion in Africa', *African Affairs*, 102: 493-501.
- Bratton, M. and Alderfer, P. with Bowser, G. and Temba, J. (1999). The effects of civic education on political culture: Evidence from Zambia. *World Development*, 27 (5), 807-824.
- Bratton, M. and Mattes, R. (2001). Support for Democracy in Africa: Intrinsic or Instrumental? *British Journal of Political Science*, 31 (3), 447-474.
- Bratton, M. and van de Walle, N. (1994). "Neopatrominial regimes and democratic transitions in Africa. *World Politics*, 46 (4), 453-489.
- Bratton, M. and van de Walle, N. (1997). *Democratic Experiments in Africa: Regime Transitions in Comparative Perspective*. Cambridge: Cambridge University Press.
- Bratton, M., Mattes, R. and Gyimah-Boadi, E. (2005). *Public Opinion, Democracy, and Market Reform in Africa*. Cambridge: Cambridge University Press.
- Braun, M. and W. Müller. 1997. Measurement of Education in Comparative Research. *Comparative Social Research* 16: 163-201.
- Breen, R. and J.O. Jonsson. 2005. Inequality of Opportunity in Comparative Perspective. *Annual Review of Sociology* 31: 1-21.
- De Graaf, N.D. and Evans, G. (1996). 'Why are the young more postmaterialist? A cross-national analysis of individual and contextual influences on postmaterial values' *Comparative Political Studies*, 28, 608-35.
- Diamond, L. (1999). *Developing Democracy: Toward Consolidation*. Baltimore: Johns Hopkins University Press.
- Dore, R. P. (1976). *The Diploma Disease*. Berkeley: University of California Press.
- Duch, R.M. and M. Taylor, (1993). 'Post-Materialism and the Economic Condition.' *American*

Journal of Political Science, 37: 747-778.

Duch, R.M. and M. Taylor, (1994). 'A Reply to Abramson and Inglehart's "Education, Security, and Postmaterialism', *American Journal of Political Science*, 38: 398-411.

Evans, G. (1995). Mass political attitudes and the development of market democracy in Eastern Europe. *Centre for European Studies Discussion Paper* No. 39. Oxford: Nuffield College.

Evans, G. and Rose, P. (2007). 'Support for democracy in Malawi: Does schooling matter?' *World Development*, 35: 904-919.

Finkel, S.E. (2003). Can democracy be taught? *Journal of Democracy*, 14 (4): 137-46.

Gibson, J., Duch, R. M. and Tedin, K. L. (1992). Democratic Values and the Transformation of the Soviet Union. *The Journal of Politics*, 54 (2), 329-371.

Glaeser, E.L., Ponzetto, and A. Shleifer, (2005). Why does democracy need education?' Mimeo Harvard.

Gutmann, A. (1987). *Democratic Education*. Princeton: Princeton University Press.

Hannum, E. and Buchmann, C. (2005). Global educational expansion and socio-economic development: An assessment of findings from the social sciences. *World Development*, 33 (3), 333-354.

Harber, C. (2002). Education, democracy and poverty reduction in Africa. *Comparative Education*, 38, 267-276.

Huntingdon, S.P. (1996). *The Clash of Civilizations and the Remaking of the World Order*, New York: Simon and Schuster.

Hyman, H. H. and Wright, C. R. (1979). *Education's Lasting Effect on Values*. Chicago: Chicago University Press.

Inglehart, R and C. Welzel (2005). *Modernization, Cultural Change, and Democracy: The Human Development Sequence*, Cambridge: Cambridge University Press.

Inkeles, A. (1983). *Exploring Individual Modernity*, New York: Columbia University Press.

Inkeles, A and Smith, D. (1974). *Becoming Modern: Individual Changes in Six Developing Societies*, Cambridge: Cambridge University Press.

Kadzamira, E. and Rose, P. (2003). Can free primary education meet the needs of the poor? Evidence from Malawi. *International Journal of Educational Development*, 23 (5), 501-516.

Kamens, D.H. (1988). Education and Democracy: A Comparative Institutional Analysis. *Sociology of Education* 61: 114-27.

Lipset, S.M. (1959). Some social requisites of democracy: economic development and political development. *American Political Science Review*, 53, 69-105.

Lipset, S.M. (1994). The social requisites of democracy revisited. *American Sociological Review*, 59, 1-22.

Miller, A. Hesli, V. and Reisinger, W.M. (1994). 'Reassessing Mass Support for Political and Economic Change in the Former USSR', *American Political Science Review*, 88, 399-411.

Moehler, D. (2005). Free and Fair or Fraudulent and Forged: Elections and Legitimacy in Africa. *Afrobarometer Working Paper* No. 55, Michigan: Michigan State University.

Nie, N.H., Junn J. and Stehlik-Barry K. (1996). *Education and Democratic Citizenship in America*. Chicago: University of Chicago Press.

Norris, P. and Inglehart, R. (2004). *Sacred and Secular: Religion and Politics Worldwide*,

Cambridge: Cambridge University Press.

Przeworski, A., Alvarez, M., Cheibub, J.A. and Limongi, F. (2000). *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990*, Cambridge: Cambridge University Press.

Reisinger, W. M., Miller, A. H., Hesli, V., and Hill Mayer, K. (1994). Political Values in Russia, Ukraine and Lithuania: Sources and Implications for Democracy. *British Journal of Political Science*, 24 (2), 183-223.

Rose, R., Mishler, W. and Haerpfer, C. (1999). *Democracy and its Alternatives: Understanding Post-Communist Societies*. Baltimore, MD: Johns Hopkins University Press.

Smith, T. W. (1995). Some Aspects of Measuring Education. *Social Science Research*, 24: 215-42.

Stasavage, D. (2005a). The role of democracy in Uganda's move to universal primary education. *Journal of modern African studies*, 43 (1). pp. 53-73.

Stasavage, D. (2005b). Democracy and primary education in Africa. *American Journal of Political Science*, 49 (2), 635-652.

Sullivan, J. L. and Transue, J. E. (1999). The psychological underpinnings of democracy: A Selective Review of Research on Political Tolerance, Interpersonal Trust, and Social Capital. *Annual Review of Psychology*, 50, 625-650.

Tessler, M. (2002). Do Islamic Orientations Influence Attitudes Toward Democracy in the Arab World: Evidence from the World Values Survey in Egypt, Jordan, Morocco, and Algeria. *International Journal of Comparative Sociology*, 2: 229-249.

United Nations (2002) *UN ICT Task Force Report*. New York: United Nations.

USAID (2005). *Education Strategy. Improving Lives through Learning*. Washington D.C.: USAID.

Valverde, G. (1999). Democracy, human rights, and development assistance for education: The USAID and World Bank in Latin America and the Caribbean. *Economic Development and Cultural Change*, 47, (2): 401-419.

van de Walle, N. (2002). Elections without democracy: Africa's range of regimes. *Journal of Democracy*, 36 (2): 66-80.

van de Walle, N. (2003). Presidentialism and clientelism in Africa's emerging party systems. *Journal of Modern African Studies*, 41 (2): 297-321.

World Bank (2001). *Chance to Learn. Knowledge and Finance for Education in Sub-Saharan Africa*. Washington DC: World Bank.

World Bank (1994). *Priorities and Strategies for Education*. Washington D.C.: World Bank.

World Bank (1999). *Education Sector Strategy*. Washington D.C.: World Bank.

World Bank (2006) *Education Sector Strategy Update*. Washington D.C.: World Bank.

World Bank (2007). *World Development Indicators*. Washington D.C.: World Bank.

Publications List

AFROBAROMETER WORKING PAPERS

- No.75 Evans, Geoffrey and Pauline Rose. "Education and Support for Democracy in Sub-Saharan Africa: Testing Mechanisms of Influence." 2007.
- No.74 Levi, Margaret and Audrey Sacks. "Legitimizing Beliefs: Sources and Indicators." 2007.
- No.73 McLean, Lauren Morris. "The Micro-Dynamics of Welfare State Retrenchment and the Implications for Citizenship in Africa." 2007.
- No.72 Ferree, Karen and Jeremy Horowitz. "Identity Voting and the Regional Census in Malawi." 2007.
- No.71 Cho, Wonbin and Matthew F. Kirwin. "A Vicious Circle of Corruption and Mistrust in Institutions in sub-Saharan Africa: A Micro-level Analysis." 2007.
- No.70 Logan, Carolyn, Thomas P. Wolf and Robert Sentamu. "Kenyans and Democracy: What Do They Really Want From It Anyway?" 2007.
- No.69 Uslander, Eric. "Corruption and the Inequality Trap in Africa." 2007.
- No.68 Lewis, Peter. "Identity, Institutions and Democracy in Nigeria." 2007.
- No.67 Mattes, Robert. "Public Opinion Research in Emerging Democracies: Are the Processes Different?" 2007.
- No.66 Cho, Wonbin. "Ethnic Fractionalization, Electoral Institutions, and Africans' Political Attitudes." 2007.
- No.65 Bratton, Michael. "Are You Being Served? Popular Satisfaction with Health and Education Services in Africa." 2006.
- No.64 Fernandez, Kenneth E. and Michelle Kuenzi. "Crime and Support for Democracy: Revisiting Modernization Theory." 2006.
- No.63 Bratton, Michael and Carolyn Logan. "Voters But Not Yet Citizens: The Weak Demand for Vertical Accountability in Africa's Unclaimed Democracies." 2006.
- No.62 Bratton, Michael and Mxolisi Sibanyoni. "Delivery or Responsiveness? A Popular Scorecard of Local Government Performance in South Africa." 2006.
- No.61 The Afrobarometer Network. "Citizens and the State in Africa: New Results From Afrobarometer Round 3." 2006.
- No.60 The Afrobarometer Network. "Where is Africa going? Views From Below: A Compendium of Trends in Public Opinion in 12 African Countries, 1999-2006." 2006.
- No.59 Bratton, Michael and Eldred Masunungure. "Popular Reactions to State Repression: Operation Murambatsvina in Zimbabwe." 2006.
- No.58 Logan, Carolyn and Michael Bratton. "The Political Gender Gap in Africa: Similar Attitudes, Different Behaviors." 2006.
- No.57 Evans, Geoffrey and Pauline Rose. "Support for Democracy in Malawi: Does Schooling Matter?" 2006.
- No.56 Bratton, Michael. "Poor People and Democratic Citizenship in Africa." 2006.

- No.55 Moehler, Devra C. "Free and Fair or Fraudulent and Forged: Elections and Legitimacy in Africa." 2005.
- No.54 Stasavage, David. "Democracy and Primary School Attendance: Aggregate and Individual Level Evidence from Africa." 2005.
- No. 53 Reis, Deolinda, Francisco Rodrigues and Jose Semedo. "Atitudes em Relação à Qualidade da Democracia em Cabo Verde." 2005.
- No. 52 Lewis, Peter and Etannibi Alemika. "Seeking the Democratic Dividend: Public Attitudes and Attempted Reform in Nigeria." 2005.
- No. 51 Kuenzi, Michelle and Gina Lambright. "Who Votes in Africa? An Examination of Electoral Turnout in 10 African Countries." 2005.
- No.50 Mattes, Robert and Doh Chull Shin. "The Democratic Impact of Cultural Values in Africa and Asia: The Cases of South Korea and South Africa." 2005.
- No.49 Cho, Wonbin and Michael Bratton. "Electoral Institutions, Partisan Status, and Political Support: A Natural Experiment from Lesotho." 2005.
- No.48 Bratton, Michael and Peter Lewis. "The Durability of Political Goods? Evidence from Nigeria's New Democracy." 2005.
- No.47 Keulder, Christiaan and Tania Wiese. "Democracy Without Democrats? Results from the 2003 Afrobarometer Survey in Namibia." 2005.
- No.46 Khaila, Stanley and Catherine Chibwana. "Ten Years of Democracy in Malawi: Are Malawians Getting What They Voted For?" 2005.
- No.45 Schedler, Andreas and Rodolfo Sarsfield. "Democrats with Adjectives: Linking Direct and Indirect Measures of Democratic Support." 2004.
- No.44 Bannon, Alicia, Edward Miguel, and Daniel N. Posner. "Sources of Ethnic Identification in Africa." 2004.
- No.43 Bratton, Michael. "State Building and Democratization in Sub-Saharan Africa: Forwards, Backwards, or Together?" 2004.
- No.42 Chikwanha, Annie, Tulani Sithole, and Michael Bratton. "The Power of Propaganda: Public Opinion in Zimbabwe, 2004." 2004.
- No.41 Mulenga, Chileshe L., Annie Barbara Chikwanha, and Mbiko Msoni. "Satisfaction with Democracy and Performance of the New Deal Government: Attitudes and Perceptions of Zambians." 2004.
- No.40 Ferree, Karen E. "The Micro-Foundations of Ethnic Voting: Evidence from South Africa." 2004.
- No.39 Cho, Wonbin. "Political Institutions and Satisfaction with Democracy in Sub-Saharan Africa." 2004.
- No.38 Mattes, Robert. "Understanding Identity in Africa: A First Cut." 2004.
- No.37 Leysens, Anthony J. "Marginalisation in Southern Africa: Transformation from Below?" 2004.
- No.36 Sall, Babaly and Zeric Kay Smith, with Mady Dansokho. "Libéralisme, Patrimonialisme ou Autoritarisme Atténué : Variations autour de la Démocratie Sénégalaise." 2004.

- No.35 Coulibaly, Massa and Amadou Diarra. "Démocratie et légitimation du marché: Rapport d'enquête Afrobaromètre au Mali, décembre 2002." 2004.
- No.34 The Afrobarometer Network. "Afrobarometer Round 2: Compendium of Results from a 15-Country Survey." 2004.
- No.33 Wolf, Thomas P., Carolyn Logan, and Jeremiah Owiti. "A New Dawn? Popular Optimism in Kenya After the Transition." 2004.
- No.32 Gay, John and Robert Mattes. "The State of Democracy in Lesotho." 2004.
- No.31 Mattes, Robert and Michael Bratton. "Learning about Democracy in Africa: Awareness, Performance, and Experience." 2003
- No.30 Pereira, Joao, Ines Raimundo, Annie Chikwanha, Alda Saute, and Robert Mattes. "Eight Years of Multiparty Democracy in Mozambique: The Public's View." 2003
- No.29 Gay, John. "Development as Freedom: A Virtuous Circle?" 2003.
- No.28 Gyimah-Boadi, E. and Kwabena Amoah Awuah Mensah. "The Growth of Democracy in Ghana. Despite Economic Dissatisfaction: A Power Alternation Bonus?" 2003.
- No.27 Logan, Carolyn J., Nansozi Muwanga, Robert Sentamu, and Michael Bratton. "Insiders and Outsiders: Varying Perceptions of Democracy and Governance in Uganda." 2003.
- No.26 Norris, Pippa and Robert Mattes. "Does Ethnicity Determine Support for the Governing Party?" 2003.
- No.25 Ames, Barry, Lucio Renno and Francisco Rodrigues. "Democracy, Market Reform, and Social Peace in Cape Verde." 2003.
- No.24 Mattes, Robert, Christiaan Keulder, Annie B. Chikwana, Cherrel Africa and Yul Derek Davids. "Democratic Governance in South Africa: The People's View." 2003.
- No.23 Mattes, Robert, Michael Bratton and Yul Derek Davids. "Poverty, Survival, and Democracy in Southern Africa." 2003.
- No.22 Pereira, Joao C. G., Yul Derek Davids and Robert Mattes. "Mozambicans' Views of Democracy and Political Reform: A Comparative Perspective." 2003.
- No.21 Whiteside, Alan, Robert Mattes, Samantha Willan and Ryann Manning. "Examining HIV/AIDS in Southern Africa Through the Eyes of Ordinary Southern Africans." 2002.
- No.20 Lewis, Peter, Etannibi Alemika and Michael Bratton. "Down to Earth: Changes in Attitudes Towards Democracy and Markets in Nigeria." 2002.
- No.19 Bratton, Michael. "Wide but Shallow: Popular Support for Democracy in Africa." 2002.
- No.18 Chaligha, Amon, Robert Mattes, Michael Bratton and Yul Derek Davids. "Uncritical Citizens and Patient Trustees? Tanzanians' Views of Political and Economic Reform." 2002.
- No.17 Simutanyi, Neo. "Challenges to Democratic Consolidation in Zambia: Public Attitudes to Democracy and the Economy." 2002.
- No.16 Tsoka, Maxton Grant. "Public Opinion and the Consolidation of Democracy in Malawi." 2002.
- No.15 Keulder, Christiaan. "Public Opinion and Consolidation of Democracy in Namibia." 2002.
- No.14 Lekorwe, Mogopodi, Mpho Molomo, Wilford Molefe, and Kabelo Moseki. "Public Attitudes Toward

- Democracy, Governance, and Economic Development in Botswana.” 2001.
- No.13 Gay, John and Thuso Green. “Citizen Perceptions of Democracy, Governance, and Political Crisis in Lesotho.” 2001.
- No.12 Chikwanha-Dzenga, Annie Barbara, Eldred Masunungure, and Nyasha Madingira. “Democracy and National Governance in Zimbabwe: A Country Survey Report.” 2001.
- No. 11 The Afrobarometer Network. “Afrobarometer Round I: Compendium of Comparative Data from a Twelve-Nation Survey.” 2002
- No.10 Bratton, Michael and Robert Mattes. “Popular Economic Values and Economic Reform in Southern Africa.” 2001.
- No. 9 Bratton, Michael, Massa Coulibaly, and Fabiana Machado. “Popular Perceptions of Good Governance in Mali.” March 2000.
- No.8 Mattes, Robert, Yul Derek Davids, and Cherrel Africa. “Views of Democracy in South Africa and the Region: Trends and Comparisons.” October 2000.
- No.7 Mattes, Robert, Yul Derek Davids, Cherrel Africa, and Michael Bratton. “Public Opinion and the Consolidation of Democracy in Southern Africa.” July 2000.
- No.6 Bratton, Michael and Gina Lambright. “Uganda’s Referendum 2000: The Silent Boycott.” 2001.
- No.5 Bratton, Michael and Robert Mattes. “Democratic and Market Reforms in Africa: What ‘the People’ Say.” 2000.
- No.4 Bratton, Michael, Gina Lambright, and Robert Sentamu. “Democracy and Economy in Uganda: A Public Opinion Perspective.” 2000.
- No.3 Lewis, Peter M. and Michael Bratton. “Attitudes to Democracy and Markets in Nigeria.” 2000.
- No.2 Bratton, Michael, Peter Lewis, and E. Gyimah-Boadi. “Attitudes to Democracy and Markets in Ghana.” 1999.
- No.1 Bratton, Michael and Robert Mattes. “Support for Democracy in Africa: Intrinsic or Instrumental?” 1999.