“Civic Education, Domain-Specific Knowledge, and Attitude Change: Evidence from an Information Campaign on Decentralization in the Democratic Republic of the Congo”

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I. Introduction

Over the past several decades, governments and international donors have sponsored numerous civic education programs among adult populations in emerging democratic contexts and post-conflict societies. These programs vary in specific emphasis and content, but they typically have the goals of teaching individuals about the nature of democratic political institutions, about the rights and responsibilities of democratic citizenship, and about the peaceful resolution of conflict within democratic systems. A recent estimate suggests that from 1990 to 2005, the United States alone spent roughly $30 to $50 million per year on civic education programs in developing democracies (Finkel and Smith 2011, p. 418). The total amount spent on civic education worldwide is certainly significantly greater than this figure, given the large number of international donors involved in these kinds of democracy assistance activities.

There is by now a growing literature on the impact of civic education interventions on their target populations (Bratton et al. 1999; Collier and Vicente 2011; Fafchamps and Vicente 2013; Finkel 2003; Finkel and Ernst 2005; Finkel and Smith 2011; Finkel et al. 2012; Paluck and Green 2009). While the specific findings differ to some degree, the emerging consensus is that these programs can be effective in increasing important aspects of civic engagement such as political knowledge, participation, and competence. For example, Finkel and Smith (2011) examined the effects of the 2002 National Civic Education Programme in Kenya and found that the intervention effectively increased political knowledge and participation. Using a field experiment, Collier and Vicente (2011) show that an information campaign encouraging voters to oppose electoral violence in Nigeria had positive impacts on empowerment to counteract violence and voter turnout. Moreover, recent work suggests that the effects of these programs on civic engagement and competence are potentially long-lasting (Finkel et al. 2012).

However, despite their relatively consistent effect on participation, engagement and competence, civic education interventions have been less successful in influencing political attitudes and values. Finkel and Smith (2011), for instance, found that Kenya’s National Civic Education Programme had only modest effects on political tolerance and tribal identification. Similarly, Finkel et al. (2012) found negligible long-term effects of civic education exposure on support for the rule of law, support for women’s rights, social trust, and in the belief that democracy is the best political system. Most recently, Beath et al. (2013), find that a gender equity program with some civic education components in Afghanistan effectively increased female participation in village governance, community life, and economic activities but had virtually no effect on gender role orientations or values. Finkel (2013) summarizes this pattern as the “hierarchy of effects” typically generated from donor-sponsored civic education initiatives: relatively strong effects on local-level participation, political knowledge, and political competence, and weaker to negligible effects on basic values, trust, tolerance, and support for democratic regimes.

The findings of an important recent study on secondary school students in the United States provide even stronger evidence in support of the “hierarchy of effects” found in previous research developing contexts. Green et al. (2011) used a field experiment to examine the effects of a randomly-assigned enhanced civics curriculum designed to promote awareness and understanding of constitutional rights and civil liberties among high school students. They found that students exposed to the enhanced curriculum displayed significantly more knowledge about constitutional principles than students exposed to the conventional high school civics curriculum. Nevertheless, the large experimentally-induced gains in knowledge resulting from the intervention had no corresponding effect on support for civil liberties. Thus it appears not only that civic education programs have relatively weak overall effects on democratic values, but also that these weak (or null) effects are found even among those individuals who did learn new information as a result of (randomized) exposure to the civic education treatment. This study represents perhaps the most pessimistic account of whether civic education, for all its possible beneficial effects on political knowledge, can then affect other important democratic attitudes and values.
These decidedly mixed findings represent a puzzle and a challenge, both for academic analyses of the impacts of civic education, and for the design and implementation of donor-sponsored civic education interventions themselves. It is close to a truism in the academic literature that increasing citizens’ education, cognitive capacities, knowledge, and skills has salutary effects on democratic attitudes (Nie et al. 1996; Galston 2001; Torney-Purta et al. 2001). Galston (2007), for example, states that: “Civic knowledge promotes support for democratic values. For example, the more knowledge citizens have of political principles and institutions, the more likely they are to support core democratic principles, starting with tolerance” (p. 637). This belief is widely shared in the international donor community, as many civic education interventions—including the one examined in this study—are designed with this process explicitly in mind: by increasing participants’ political knowledge, attitudinal and value change supportive of democracy ought naturally to follow (e.g., IFES 2009). Nevertheless, mounting evidence suggests that attitudinal effects of civic education initiatives are at best elusive, with little to no support for the claim that a direct causal effect exists between the political knowledge that may be gained from these interventions and related democratic attitudes and values.

We argue, however, that calling into question the entire knowledge to attitude linkage in donor-sponsored civic education is premature for a number of reasons. First, there have been few tests of the impact of civic education on a host of attitudes relevant to democracy that may be more pliable than deep-seated values such as tolerance, tribal identification, social trust, and gender role orientations. Civic education initiatives often attempt to teach individuals about important political issues that do not necessarily involve an individual’s core identity of political values, and orientations related to these issues may be more amenable to change based on the increased knowledge gained from the programs. For example, a large component of the 2003 Kenya National Civic Education Programme’s (NCEP) curriculum focused on increasing knowledge about the ongoing constitutional reform process as a means for increasing support for constitutionalism per se, and for increasing the support for specific constitutional reform proposals such as limiting the powers of the Presidency, increasing the responsibilities of the Prime Minister, and increasing the public’s formal involvement in the constitutional review process (Finkel and Smith 2011). These issues continued to be important (and highly controversial) matters for public debate at least until the adoption of a new Kenyan constitution in 2010. It is certainly plausible that knowledge gained in the workshops and other NCEP events altered individuals’ preferences on these matters, and did so in deeper and more consequential ways than they may have changed “deeper” values such as tolerance or trust. Yet, there has been little evidence adduced one way or the other on the effects of civic education-induced knowledge on these kinds of “intermediate” democratic orientations and preferences.

Second, a substantial body of public opinion research over the past several decades indicates that domain-specific knowledge has significantly greater influence on attitudinal change than general political knowledge. For example, Kuklinski et al. (1982) and Gilens (2001) find that providing individuals with policy-specific factual information, such as the crime or unemployment rate, or changes in the size of the federal deficit, led them to adjust their policy preferences related to those specific issues. They argue that ignorance of policy-specific facts leads many people to hold political opinions different from those they would hold if they were “fully informed.” This argument has been supported as well by recent experimental studies suggesting that exposing individuals to domain-specific information significantly alters domain-specific attitudes. Cook et al. (2010), for example, use a natural experiment to show that receiving information about Social Security benefits in the United States results in increased trust in the program. They found that individuals who received mailings of personal statements from the Social Security Administration increased their knowledge of benefits, taxation, and administration and that this new domain-specific information, in turn, generated more confidence in the viability of Social Security. Therefore, we may expect that in order to change democratic attitudes or policy preferences related to democracy, civic education initiatives need to impart relevant domain-specific information, with increases
in general factual knowledge being much less relevant. Aside from the Green et al. (2011) study, however, the civic education literature has focused almost exclusively on general political knowledge, and may therefore have underestimated the ways that these programs may induce attitude change.

Finally, democratic attitudes are multidimensional. Some aspects tap into support for a specific policy or political issue in the abstract while other components relate to evaluations of how incumbents or the regime performs with regards to the same policy or issue. Therefore, increases in knowledge about a particular issue may affect different attitudinal dimensions of the issue in different ways: more factual domain-specific knowledge may affect relatively pliable political attitudes such as support or opposition to a policy (Gilens 2001), confidence in the benefits of a program (Cook et al. 2010), or endorsing specific policy reforms (Boeri and Tabellini 2012; Kuklinski et al. 1982), while affecting evaluative attitudes based on incumbent or regime performance or different ways. In fact, civic education-induced knowledge may have a negative impact on evaluations, as more information provides individuals with both greater awareness of the deficiencies of existing efforts in dealing with particular issues, and heightened expectations regarding what incumbents or the regime at large ought to be doing (Finkel et al. 2000; Moehler 2008). To this extent, proper tests of the civic education knowledge-attitude nexus need to encompass the effects of domain-specific information on the full range of domain-specific attitudes and preferences.²

In this paper, we explore the impact of civic education on domain-specific knowledge and attitudes and on more general democratic and deep-seated values in the context of a field experiment related to an information campaign on political decentralization in the Democratic Republic of the Congo (DRC). We examine the impact of VOICE (Voter Opinion and Involvement through Civic Education), a civic education program focusing on decentralization in the DRC implemented in 2010-2011 by IFES (International Foundation for Electoral Systems), an international NGO/think tank.² Our specific emphasis is on the central civic education-related activity of the VOICE program, sessions called Boîtes à Images, in which facilitators from local community organizations presented audiences with a variety of images designed to stimulate learning and increase support for the planned decentralization and for general democratic processes in the DRC. In order to overcome biases related to self-selection into the civic education sessions, we implement an encouragement design, whereby some respondents were randomly assigned to receive an invitation to attend an upcoming Boîtes à Images event after completing a baseline survey, with both “encouraged” and “non-encouraged” respondents re-interviewed weeks after the Boîtes session had taken place. As we will show, this design allows us to estimate the direct effect of exposure to Boîtes à Images sessions on knowledge about decentralization, as well as obtaining estimates of the “downstream” effects of exogenous gains in decentralization knowledge on a range of attitudes about decentralization policy, evaluations of the ongoing decentralization process, and general democratic values such as political tolerance. Ours is one of the first civic education evaluations to make use of the encouragement design, as well as one of the first to use its design features to estimate “downstream” experimental effects.

¹ A final aspect of the knowledge-attitude relationship in civic education concerns the possibility of conditional effects, such that greater impacts on attitudes – even “deep-seated” ones such as political tolerance – may be found when the intervention is of higher quality, i.e., makes greater use of participatory pedagogical methodologies, employs better trained and more knowledgeable facilitators, and provides participants with more frequent exposures to democratic messages. We do not pursue these possibilities here (Finkel and Smith 2001; Finkel and Ernst 2005), largely because the variations in treatment quality were not built into the experimental design described below.

² The project was conducted in collaboration with Rola Abdul-Latif, Rakesh Sharma, and Daniel Laurent of IFES in Washington, D.C. We are grateful to them as well as to the IFES office in Kinshasha for support, and to Guy Grossman, Macartan Humphries, Devra Moehler, Christopher Blattman, and Elizabeth Paluck for advice on design and analysis issues as the project progressed.
The structure of the sessions and VOICE’s strong emphasis on disseminating factual information about decentralization in the DRC affords the opportunity to explore whether civic education-induced gains in domain-specific knowledge are causally linked to changes in relevant political attitudes. More specifically, we focus on whether learning about decentralization led to corresponding changes in attitudes toward decentralization policy, in evaluations of the decentralization process in the DRC, and in more entrenched democratic values such as political tolerance. The findings provide strong evidence of both domain-specific informational and domain-specific attitudinal effects of the civic education intervention, with the pattern of effects largely in line with the expectations discussed above. Exposure to the Boîtes events induced large gains in individuals’ factual decentralization knowledge, with these gains being among the largest registered in extant civic education evaluation research. This knowledge then led to significant downstream attitudinal effects, such that individuals became more strongly supportive of decentralization as a policy and institutional alternative, and became more critical and less supportive of the overall process of decentralization as it was ongoing in the DRC. At the same time, no downstream effects on more generalized democratic values such as political tolerance or deep-seated values such as tribal identification were realized. These results provide a more nuanced assessment of the relationship between knowledge and various dimensions of political attitudes than has been shown thus far in the civic education evaluation literature.

The paper is organized as follows. In Section II, we first describe the VOICE civic education program and the Boîtes à Images events that represent the program’s main civic education intervention. We then describe our research design in Section III, followed by an exposition of our models and the statistical procedures we use to estimate informational and downstream attitudinal effects in Section IV. Section V contains the results, and Section VI concludes by discussing the implication of our findings for furthering our understanding of the effects of donor-sponsored civic education programs, for our expectations regarding what civic education interventions can and cannot achieve in developing democratic contexts, and for clarifying the effects of domain-specific knowledge on both domain-specific attitudes and other democratic orientations.

II. Decentralization in the DRC and the VOICE Program

In 2006, the Government of the Democratic Republic of Congo (DRC) committed to a constitutionally-mandated process of decentralization entailing the passage of a law on Entites Territoriale Decentralise (ETDs), creating 26 provinces from the existing 11 and more than 6,000 subprovincial electoral constituencies from the existing 189, giving provinces more control over its revenue, and establishing a fund for local development projects. The motivations behind decentralization were to bring greater accountability to existing governmental institutions, to reduce levels economic and political inequality across different geographic regions, to enhance the inclusion of broader strata of Congolese civil society, and to provide greater input from communities into decisions related to economic development in their localities (Dizolele 2010). These putative benefits are also commonly advanced among international donors, who have increasingly advocated decentralization as a key institutional reform to stimulate economic and political development in many contexts (Blair 1998). The decentralization process in the DRC advanced fitfully until ongoing political crises and tensions between various factions within the government effectively stalled formal implementation (Trefon 2010). At the time of our study, no de facto changes regarding the creation of subnational administrative units, holding local elections, control over provinces’ revenue, and the local development fund had taken place (Weiss and Nzongola-Ntalaja 2013).

In this context, the International Foundation for Electoral Systems (IFES) designed and implemented the Voter Opinion and Involvement through Civic Education program (VOICE) with the goal of improving the capacity of the Congolese people to participate effectively in the ongoing process of decentralization.
The VOICE program consisted of a range of activities aimed at enabling ordinary Congolese citizens to better understand decentralization policy and engage in the decentralization process itself, motivating people to participate in government and politics more generally, and providing local community organizations with the capacity to implement civic and voter education campaigns. The central civic education activity of VOICE were the Boîtes à Images sessions in which facilitators from community-based organizations employed a variety of images and guided discussion to teach participants about decentralization and, to a lesser extent, broad issues of political, economic, and democratic development.

IFES specifically designed the use of images as a civic education delivery mechanism in order to convey messages in the DRC context, where adult literacy reaches only 67% in large cities and is far less in rural and more remote populations. According to the materials provided to Boîtes facilitators during their training sessions, the images were designed to be “a tool that triggers dialogue”, one that “encourages participants to share what they know, hear, live and understand about decentralization” in “a space where men and women express themselves freely.” Moreover, all of the images were accompanied by sample questions to pose to the audience in order to stimulate discussion and learning. To this extent, the Boîtes sessions were designed to be highly participatory forums where active learning took place, stimulated by the specific images about decentralization that were presented as well as guidance from the facilitators. These sessions, lasting roughly two hours with audiences of approximately 100 individuals, were conducted throughout 2010 and 2011 in four target provinces—South Kivu, Maniema, Kantanga, and Bandundu.3

The 13 Boîtes à Images or were organized around three general “modules” corresponding to different aspects of the decentralization process and different aspects of civic education emphasized by the VOICE program. As noted above, the sequencing of these modules reflects the implicit expectation of attitude change through increased knowledge. Two modules dominated the Boîtes à Images sessions under consideration here: “let’s understand our new institutions,” and “let’s be a part of the new Congo.”

Module 1. Let’s understand our new institutions: This module introduced concepts of decentralization in the DRC and the importance of participation in local elections and government; it explain decentralized institutions and decentralization law, the responsibilities of urban and municipal counselors, and the responsibilities of sector and chefferie counselors.

Module 2. Let’s be a part of the new Congo: This module introduced the roles of the actors in the decentralization and political process (the election commission, politicians, political parties and opposition, judges, civil society), and explains the rationale for decentralization as well as the benefits of democracy and active participation in civic life.

Module 1’s theme of understanding decentralization policy is illustrated by two images reproduced in Figures 1 and 2. Image #2 is entitled “Decentralization in the Democratic Republic of the Congo”, and shows the map of the 11 current provinces and a large arrow pointing to the envisioned 26 provinces (including Kinshasa) post-decentralization. Image #8, entitled “Transfer of Resources”, depicts the revenue flow envisioned in a decentralized DRC from the local Entities Territoriale Decentralise (ETDs) to the central government and back again, with some of the funds to the localities coming from the newly-created Caisse Nationale de Péréquation, an institution that will provide funds for local development in order to equalize resources across different geographic regions.

3 Due to budget limitations, our study is limited to the Boîtes à Images sessions conducted during the summer of 2011 in Bandundu province.
Module 2’s theme of political participation and civic engagement is exemplified in Image #11 (shown in Figure 3), “The Role of the Citizen”, which depicts ordinary individuals engaging in various acts of political participation, including attending a community meeting on building awareness about decentralization (“Sensibilisation sur la décentriliation”), submitting a petition to an elected official, and participating in a peaceful demonstration in support for the decentralization process. Of particular interest is the sequence of images shown throughout the Boîtes à Images sessions: factual information first, followed by images in support of the policy and in support of more general democratic processes. This process mirrors our expectations for the program’s potential sequence of causal effects.
III. Study Design

Implementing an experimental design in the context of donor-sponsored civic education research is by no means straightforward. Because attendance at workshops or other adult civic education events is entirely voluntary, there is no feasible way to compel even randomly-assigned treatment individuals from some population to attend the event, nor (in most cases) to prevent randomly-assigned control individuals from attending the event either. In other words, donor-sponsored civic education programs are cases in which two-sided noncompliance is expected. To overcome this problem, we implement an encouragement design, in which some randomly selected individuals are motivated through a baseline interview to receive a given kind of treatment while others are not given such motivation (Duflo et al. 2007; Hirano et al. 2000). As we explain below in more detail, this encouragement design allows us to estimate the direct and downstream effects the Boîtes à Images sessions.

Encouragement Design

Our study was designed to produce a random sample of 140 individuals residing in each of eight villages where a Boîtes à Images event was to take place for a total of 1,120 respondents. We randomly selected eight different groupements in the Bandundu province of the DRC where we had knowledge that Boîtes events were to occur\(^4\), and then asked the implementing NGO in that groupement to provide BERCI, the survey company contracted to collect the study data, with a list of villages that were specifically targeted for an event.\(^5\) BERCI selected one village at random from each groupement to serve as a research site, though logistical and travel difficulties made village substitutions necessary in four instances. These deviations from the initial sampling plan may have affected the representative of the sample sites, but, as will be described below, randomization was maintained in the experimental manipulation within treatment villages, thus preserving a high level of internal validity for the study.

The encouragement design involved randomly inviting 100 of the 140 respondents in each research site to attend the upcoming Boîtes à Images event upon concluding the baseline interview. Individuals randomly assigned to receive the encouragement were told the following script:

Thank you very much. We’ve finished the interview, but before we leave, I’d like to tell you about an event that is going to take place this _DATE OF BOITE EVENT_ at _PLACE OF BOITE EVENT_. This gathering will be an animated civic discussion with images related to the process of decentralization that is now going on in the country. It is organized by _NGO NAME_, an organization that is not affiliated with the government nor with any political party. The event will take place at the following address: _ADDRESS OF BOITE EVENT_.

There won’t be room for everyone to come, so our company has asked us to invite some of the people we are talking to participate in the event. Do you think it would be possible

\(^4\) Cost considerations prevented us from including a greater number of provinces (our initial design called for including villages in Bandundu, Katanga, South Kivu, and Maniema provinces) and a greater number of villages (our initial design called for 48 research sites).

\(^5\) BERCI (Bureau d'Etudes de Recherche et de Consulting International) is a respected survey company in the DRC, with much experience conducting surveys for international donors such as the World Bank, the National Endowment for Democracy, and others.
that you would participate? (IF YES): After the event takes place, if you give them your name, the facilitators will reimburse you any of your travel expenses.\(^6\)

The encouragement exogenously increases the probability of receiving some treatment as a result of the randomly-assigned invitation. This procedure ensures that the invitation to attend the Boîtes à Images workshop is unrelated to all factors—including unobservables—that are correlated with both treatment exposure and decentralization knowledge and attitudes. In our design, random assignment to receive the invitation was blocked at the village level. Blocking improves the precision of our estimates because it ensures that encouraged and non-encouraged individuals within research sites have similar potential outcomes (Gerber and Green 2012).\(^7\)

<table>
<thead>
<tr>
<th>Table 1. Summary of Research Design</th>
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<tr>
<td><strong>Respondents Per Village</strong></td>
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<tr>
<td>Research Sites (8 Villages)</td>
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<tr>
<td>Encouraged to Attend Boîte Event</td>
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<tr>
<td>Not Encouraged to Attend Boîte Event</td>
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<tr>
<td>Totals: Baseline Survey</td>
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<td>Totals: Post-Test Survey</td>
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Table 1 summarizes our research design. We interviewed 140 individuals in each of the eight research sites, dividing respondents randomly between an encouraged group and a non-encouraged group. This design allows us to compare the encouraged group with the non-encouraged group in various ways in order to arrive at different estimates of the effects of the VOICE program.

**Survey Instrument and Field Work**

The survey instrument included a variety of questions relating to decentralization, which was the general theme of the Boîtes events. The questions relate to general and specific knowledge of decentralization, positive and negative views of decentralization policy, general support for the decentralization process in the DRC, political tolerance, and national versus tribal identity. A list of the all the variables used, the exact question wording, response categories, and reliability coefficients of our scales can be found in the supplemental appendix.

Our survey also included a battery of questions inquiring about individuals’ attendance to the Boîtes events. In the post-workshop survey, all respondents were asked whether they had attended the workshops that had recently taken place in the research sites. This, however, introduces the potential for social desirability in reporting attendance to the events (See Albertson and Lawrence 2009). To reduce

\(^6\) Importantly, all individuals who attended the event were given the equivalent of $5 to offset travel expenses, whether or not they were encouraged to attend or not. This prevented any bias resulting from resentment of non-encouraged attendees who may nevertheless have been in our analysis sample.

\(^7\) The encouragement design is also beneficial in overcoming other problems in assessing the effects of Boîtes attendance, i.e., the potential lack of attendees in the analysis sample. By introducing a random encouragement to attend the Boîtes event in the pre-test (baseline) survey, we also increase the likelihood that a sufficient number of individuals among those sampled were actually in attendance at the event.
measurement error in self-reported attendance, we introduced a specific recall measure to assess the validity of responses (Sovey and Green 2011). Participation of individuals who claimed to have attended a particular Boîtes event in our survey was verified by asking a specific question about the method of delivery of the Boîtes à Images session (i.e., a presentation and discussion about images). This resulted in a 77% attendance rate among those in the treatment sample compared with the 87% attendance rate as measured by self-reports.

Baseline interviews were begun by BERCI in the period between June 8, 2011 (Bulungu Territorie) and July 23, 2011 (Kusango Lunda Territorie). In each territogie, the baseline survey was conducted within the week prior to the Boîtes à Images session taking place in each village. Interviewers followed standard random route household interviewing procedures. Detailed information about the respondent and how s/he could be recontacted in a future follow-up survey was collected. Following the Boîtes session, interviewers attempted to reinterview all respondents from the baseline wave. This proved highly successful, as BERCI achieved a remarkable 98% reinterview rate. There were no differences in panel attrition rate between treatment and control villages. Post-Boîtes interviews were conducted between July 8, 2011 and September 4, 2011; this period represented a time of between 1 and 26 days after the Boîtes session. The overall time between pre- and post-event interviews ranged from 3 to 39 days.

IV. Models and Estimation Procedures

Our research design allows us to estimate the impact on decentralization knowledge among individuals who were randomly encouraged to attend the Boîtes sessions (intent-to-treat effect) and among compliers with the random assignment (complier average causal effect). We call these the “informational effects” of the VOICE program. In addition to estimating the direct effects of civic education exposure, our design also allows us to estimate the impact on decentralization attitudes among individuals who experienced exogenously-induced increases in decentralization knowledge, that is, as a result of the randomized encouragement. We call these the “downstream attitudinal effects” of the VOICE program.

Informational effects

The intent-to-treat effect (ITT) represents the effect of the randomized encouragement on decentralization knowledge rather than of receiving the treatment itself. The ITT is an unbiased estimate of the difference in the average difference in y for individuals randomly encouraged to attend the Boîtes sessions:

\[
\Delta \text{KNOWLEDGE}_i = \Delta \beta_0 + \beta_1 \text{ENCOURAGEMENT}_i + \Delta \epsilon_i
\]

where \(\Delta \beta_0\) represents the average change over time in decentralization knowledge for non-encouraged individuals, and \(\beta_1\) represents additional changes in decentralization knowledge for individuals who were encouraged to take the treatment. Since \(\text{ENCOURAGEMENT}\) is randomly assigned, and hence unrelated to factors in the unobserved error term that may also be related to changes in the dependent variable, \(\beta_1\) provides an unbiased estimate of the causal effect on decentralization knowledge of being randomly encouraged to attend a Boîtes event.\(^8\)

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\(^8\) Compliers are those individuals who attended the Boîtes event only if they were encouraged to do so, and those individuals who did not attend the event only if they were not encouraged to do so. These individuals respond to the exogenous (random) encouragement, as opposed to “Always Takers” and “Never Takers” – those who attend or not attend, respectively, regardless of being encouraged to do so (See Angrist and Pischke 2009, p. 158-161).

\(^9\) Random assignment worked satisfactorily in the field, as there were virtually no differences between encouraged and non-encouraged individuals on demographic, political, or pre-treatment decentralization orientations. This produced treatment and control groups that were statistically identical aside from their being encouraged to attend
While the ITT uncovers the effect of random assignment, we are also interested in the effects of attending the Boîtes session on decentralization knowledge. Suppose some encouraged individuals failed to attend the Boîtes events and some non-encouraged individuals participated in them. Under this scenario, the ITT will underestimate the informational effects of the Boîtes sessions given dilution due to noncompliance. We observed significant amounts of noncompliance: 83% of the encouraged sample was coded as having attended the event, while a full 62% of the non-encouraged sample attended the event as well. This yielded a compliance rate of 21%. Dividing the ITT by the estimated compliance rate produces the complier average causal effect (CACE), which is defined as the effect of the treatment for the subset of the sample who complied with the encouragement (See Figure 4).

The CACE can also be identified using instrumental variables estimation with “encouragement” as the exogenous instrument to proxy for self-reported Boîtes session attendance. In the context of two-stage least squares regression, we regress our “validated” Boîtes attendance variable \(A_i\) on encouragement \(E_i\) and control variables \(Z_k\) that may be related to attendance at the Boîtes events in the first stage to generate a predicted attendance variable \(A_i^*\):

\[
A_i = \beta_0 + \beta_1 E_i + \beta_k Z_k + \varepsilon_i \tag{2}
\]

Because \(A_i\) is predicted by an exogenous variable that is unrelated to the error term \(\varepsilon_i\), then \(A_i^*\) is also unrelated to the error term. In the second stage, we use \(A_i^*\) as the “proxy” for attendance to arrive at the complier average causal effect:

\[
\Delta \text{KNOWLEDGE}_i = \Delta \beta_0 + \beta_1 A_i^* + \beta_k Z_k + \Delta \varepsilon_i \tag{3}
\]

the upcoming Boîtes event. Nevertheless, we include pre-treatment levels of our dependent variables and other controls in all our models to improve the precision of the estimates.
where $\beta_1$ represents the average change in decentralization knowledge for individuals who attended the session as the result of the randomized encouragement, that is, individuals who were exogenously “pushed” into Boîtes exposure.

It is important to keep in mind exactly what each estimate can and cannot tell us about the informational effects of the Boîtes events. The ITT represents the expected benefit of the encouragement for a randomly selected individual. That is, the ITT provides a summary expected value from all of the following potential processes: an individual may or may not be randomly encouraged to attend a session, she may or may not comply with the encouragement, she may have attended or not attended regardless of the encouragement, and there may be differential or heterogeneous effects of the treatment depending on her being a “complier” with the encouragement, or an “always taker” of the treatment. The ITT, then, provides a sense of what random encouragement to take up a treatment for a random individual may produce – and which may mimic to some degree how recruitment to civic education events take place in practice– but it does not provide a direct estimate of the treatment effect per se.

The CACE, on the other hand, identifies the causal effect of a civic education intervention on the specific set of individuals who are pushed into attendance as a result of being encouraged. Thus, it represents the impact of attending the Boîtes sessions on individuals who may otherwise have been marginally likely to attend. This is an important, but at the same time it is likely to represent only a fraction of the event’s actual attendees. In our case, for example, 62% of the not encouraged group nevertheless attended the event, indicating that 62% of the research sites were comprised of “Always Takers”. We can then calculate that, of the individuals who attended the sessions, three-quarters were “Always Takers” and only one-quarter were “Compliers”. The CACE identifies the effect of the treatment only among this latter group.

**Downstream attitudinal effects**

We take advantage of the exogeneity of the randomized encouragement to estimate downstream effects, that is, whether experimentally induced increases in decentralization knowledge have a causal effect on decentralization attitudes. The ITT in this case represents the direct effect of the encouragement on decentralization attitudes (See Equation 1 above). Our focus here, however, is on the impact of decentralization knowledge on political attitudes. To this end, we use the randomized encouragement as an instrument for decentralization knowledge to identify the local average treatment effect (LATE) or the downstream attitudinal effects among the subsample of individuals who experienced exogenous increases in decentralization knowledge.

The LATE can also be identified using instrumental variables estimation with “encouragement” as the exogenous instrument to proxy for decentralization knowledge. In the context of two-stage least squares, we regress changes in decentralization knowledge on encouragement and control variables that may be related to knowledge in the first stage and generate a predicted knowledge variable (See Equation 2). In the second stage, we use this predicted variable as a proxy for changes in decentralization knowledge to estimate the LATE:

\[
\Delta \text{ATTITUDES}_i = \Delta \beta_0 + \beta_1 K^* + \beta_k Z_k + \Delta \epsilon_i
\]

---

10 Gerber and Green (2012) define downstream experiments as “studies that trace the indirect consequences of a randomly generated causal effect” (p. 193).
where $\beta_1$ represents the average change in attitudes for individuals who increased in decentralization knowledge as the result of the randomized encouragement, that is, individuals experiencing exogenously-induced gains in knowledge (Figure 5).

**Figure 5. Downstream Attitudinal Effects**

In this model, the LATE identifies the downstream effect of a civic education intervention on the specific set of individuals who increased in decentralization knowledge as a result of receiving the randomized encouragement. Therefore, it captures whether exogenous increases in knowledge have an impact on political attitudes among those individuals who may have otherwise not learned about decentralization.

Sensitivity analysis of exclusion restriction

Our estimates of the informational effects of civic education and particularly the downstream attitudinal effects of exogenously-induced knowledge rest on the exclusion restriction assumption (See Angrist and Pischke 2009). This assumption requires that the randomized encouragement influences the outcome only through its effect on the endogenous variables. Formally, we can express this in reduced form as:

\[ Y = \beta X + \gamma Z + \varepsilon \]

where $Y$ is a vector of outcomes, $X$ is a matrix of endogenous variables, and $Z$ is the randomly assigned encouragement which is unrelated to the unobservables captured by $\varepsilon$. Since $X$ is endogenous, parameters $\beta$ and $\gamma$ are not jointly identified so assumptions about $\gamma$ are necessary to obtain estimates of $\beta$, the parameter of interest. Exclusion restriction requires that $\gamma = 0$. In our informational model, the exclusion restriction assumption would be violated if being encouraged to attend the *Boîtes* session led individuals to learn about decentralization, independent of attending the event. For the downstream attitudinal models, this assumption would be violated if being encouraged to attend the *Boîtes* session prompted individuals to change their attitudes about decentralization, regardless of whether they learned anything about decentralization. If these scenarios occurred, $\gamma$ would probably be close to zero but perhaps not equal to zero.

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11 Another assumption is monotonicity which requires that there are no “defiers,” that is, individuals who take the treatment only if not encouraged and do not take it only if encouraged. This implies that being encouraged to attend the *Boîtes* sessions can only motivate an individual to go the workshop (or to learn about decentralization) and in no case deter them from doing so, which seems plausible in this case.
While it is unfeasible to estimate whether the exclusion restriction holds exactly, we can conduct a sensitivity analysis of “plausible exogeneity” as proposed by Conley et al. (2012) to assess the degree to which this assumption has to be violated to challenge our inferences. Their most conservative approach consists of specifying a range of plausible values of \( \gamma \) without assuming a prior distribution in order to obtain interval estimates for \( \beta \). This produces valid confidence intervals by requiring correct coverage for every possible case, including those that may be unlikely. Therefore, this inferential strategy allows us to present evidence of the robustness of our findings while relaxing the exclusion restriction assumption.

V. Results

We begin with the informational effects of the VOICE program, which are the causal effects of being randomly encouraged to attend the Boîtes session (ITT) and of attending the Boîtes because of the randomly assigned encouragement (CACE) on decentralization knowledge. The results are shown in Table 2. The ITT effect on decentralization knowledge is .67 [95% CI of .47 to .88] with a standard error of .11, indicating that randomly encouraged individuals significantly improved on the scale by two-thirds of an answer compared to non-encouraged individuals. This suggests that the randomized recruitment effort that our encouragement design represented had a positive and substantive impact on the VOICE program’s main expected outcome. The CACE indicates that among the purely exogenous portion of Boîtes attendees the informational effects were of substantial magnitude, with gains in decentralization knowledge of three more correct responses than non-attendees [95% CI of 2.12 to 3.89]. These are among the largest gains in knowledge reported in the civic education literature. Taken together, the ITT and the CACE suggest that the VOICE program was extremely effective in disseminating factual information about decentralization in the DRC. As discussed above, this is consistent with the general pattern emerging from civic education evaluation research, although the informational effects presented here are one of the largest reported thus far.

| Table 2. Informational effects of the VOICE program |
|---------------------------------|---|---|
| Overall decentralization knowledge (6 questions) | 0.67*** | 3.00*** |
| (0.11) | (0.45) |
| ▪ General decentralization knowledge (2 questions) | 0.28*** | 1.23*** |
| (0.05) | (0.24) |
| ▪ Specific decentralization knowledge (4 questions) | 0.39*** | 1.76*** |
| (0.08) | (0.31) |

Robust standard errors in parentheses. * p<0.05; ** p<0.01; *** p<0.001

Note: The ITT is estimated using ordinary least squares (OLS) regression and the CACE using two-stage least squares regression, both with village fixed effects.  

We now turn to the attitudinal effects of the VOICE program, which are the downstream effects of being randomly encouraged to attend the Boîtes session (ITT) and of gains in decentralization knowledge resulting from the randomly assigned encouragement (LATE) on political attitudes. Our focus is on the LATE, as our goal is to analyze the downstream effects of exogenous increases in decentralization knowledge. The results, shown in Table 3, indicate that gains in decentralization knowledge significantly improve positive views of decentralization as a policy (\( \beta = 0.18, \) s.e. = .06) and distinguishing the net

\[ \beta = 0.18, \text{ s.e.} = 0.06 \]

Random assignment was blocked at the village level and blocks were of identical size. Linear fixed effects adjust standard errors accordingly under the assumption of homogenous treatment effects across villages (See Dunning and Hyde 2008).
positive aspects of decentralization policy from its negative aspects ($\beta = 0.26$, s.e. = .12). This suggests that domain-specific knowledge can, in fact, influence domain-specific policy attitudes at least in the abstract.

Table 3. Downstream Attitudinal effects of the VOICE program

<table>
<thead>
<tr>
<th></th>
<th>ITT</th>
<th>LATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive decentralization considerations (3-item index)</td>
<td>0.12*** (0.04)</td>
<td>0.18** (0.06)</td>
</tr>
<tr>
<td>▪ Local governments are more likely than the central government to find solutions for the population</td>
<td>0.15*** (0.05)</td>
<td>0.22** (0.08)</td>
</tr>
<tr>
<td>▪ The DRC is too large to be controlled only by the central government</td>
<td>0.02 (0.05)</td>
<td>0.03 (0.08)</td>
</tr>
<tr>
<td>▪ Decentralization gives ordinary citizens more control over economic development</td>
<td>0.26*** (0.07)</td>
<td>0.32*** (0.10)</td>
</tr>
<tr>
<td>Negative decentralization considerations (2-item index)</td>
<td>–0.04 (0.05)</td>
<td>–0.06 (0.09)</td>
</tr>
<tr>
<td>▪ Decentralization will generate more conflict</td>
<td>–0.02 (0.06)</td>
<td>–0.03 (0.10)</td>
</tr>
<tr>
<td>▪ Decentralization will bring more corruption</td>
<td>–0.07 (0.07)</td>
<td>–0.11 (0.12)</td>
</tr>
<tr>
<td>Net decentralization considerations (Positive – Negative)</td>
<td>0.15* (0.07)</td>
<td>0.26* (0.12)</td>
</tr>
<tr>
<td>Support for the DRC decentralization process</td>
<td>–0.16*** (0.05)</td>
<td>–0.23** (0.08)</td>
</tr>
<tr>
<td>Political tolerance</td>
<td>0.10* (0.05)</td>
<td>0.16* (0.10)</td>
</tr>
<tr>
<td>National vs. tribal identity</td>
<td>–0.01 (0.05)</td>
<td>–0.01 (0.08)</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses. † p<0.10; * p<0.05; ** p<0.01; *** p<0.001

Note: The ITT is estimated using ordinary least squares (OLS) regression and the LATE using two-stage least squares regression, both with village fixed effects.

On the other hand, gains in decentralization knowledge actually have a significantly negative impact on support for the decentralization process in the DRC ($\beta = –0.23$, s.e. = .08). Here, domain-specific knowledge seems to curb positive process evaluations, perhaps due to the lack of progress in the actual implementation of decentralization reforms at the time of the study. Finally, our results show that the impact of domain-specific knowledge on political tolerance is modest ($\beta = 0.16$, s.e. = .10) and considerably weaker than its effect on policy-specific and evaluative attitudes. The downstream effect on national versus tribal identification is null ($\beta = –0.01$, s.e. = .08). These findings are consistent with our expectations that certain deep-seated values will likely be resistant to change even in the face of substantial gains in knowledge. Overall, our findings suggest a far more nuanced picture of the link between political knowledge and attitude change that had been heretofore acknowledged in the civic education literature.

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13 We calculate effect sizes (Cohen’s $d$) based on the ITT to compare the strength of the informational and attitudinal effects of the VOICE program. As expected, the strongest effect size was on decentralization knowledge ($d = 0.31$), followed by the negative effect on support for the decentralization process in the DRC ($d = –0.15$), and by the effect on positive decentralization considerations ($d = 0.11$). The smallest effect size is on political tolerance ($d = 0.02$).
Sensitivity Analysis

To allay concerns about the potential for the randomized encouragement to affect our outcome variables in unobservable ways, we conduct a sensitivity test of the exclusion restriction. This procedure allows us to evaluate whether our inferences about the informational and downstream attitudinal effects of civic education hinge on an invalid assumption. Following Conley et al. (2012), we set \( \gamma \) in Equation 5 to take values different from zero and obtain interval estimates for \( \beta \), our parameter of interest. Since we remain agnostic about whether the effect of the encouragement on outcomes is positive or negative, we specify symmetric intervals with support restrictions taking the form \( \gamma \in [-\delta, +\delta] \) (Ibid, p. 266). The results are displayed in Figures 6 thru 8. The solid lines represent the estimated effect and the dashed lines are 95% confidence intervals conditional of values of \( \gamma \).

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14 We also consider whether our instrumental variable (i.e., encouragement) has explanatory power. An \( F \)-statistic of at least 10 should be obtained to avoid weak instrument bias (Angrist and Pischke 2009). In our informational model the first-stage \( F \)-statistic was 64.29 and in our attitudinal models we obtained first-stage \( F \)-statistics ranging from 20.55 to 28.79.

15 For exposition purposes, we discuss the results of the sensitivity analysis based on the hypothesized direction of our estimates.
Figure 6 shows that significant informational effects of civic education exposure obtain even if the encouragement had a direct effect on decentralization knowledge of 0.49, which is more than twice as large as its estimated effect on Boîtes session attendance (0.22) and one sixth the size of the CACE. Considering the large gains in decentralization knowledge we found, the value of γ necessary to overturn our inferences about the informational effects of civic education is substantial. For the downstream attitudinal models, Figure 7 shows that decentralization knowledge would have a significant impact on positive views of decentralization policy even if the encouragement has a direct effect of 0.046, which is almost as large as the normalized first-stage effect (0.06)\(^6\) and one quarter the size of the LATE. The results are similar in magnitude in the case of support for the decentralization process in the DRC (Figure 8). In sum, the sensitivity analysis suggests that our results are robust to considerable violations of the exclusion restriction.

VII. Conclusions

This paper examines whether the Voter Opinion and Involvement through Civic Education Program (VOICE) in the Democratic Republic of the Congo — more specifically, the Boîtes à Images sessions that were the program’s core civic education tool — was successful in changing individuals’ knowledge about the ongoing decentralization process in the country, and whether such changes in knowledge relate to shifts in political attitudes. To accomplish these tasks, we implemented a field experiment whereby 100 individuals in each of eight research sites were randomly encouraged at the end of a baseline interview to attend a Boîtes à Images event, while 40 randomly-selected individuals received no information about the workshop. Follow-up interviews were conducted with respondents between one day and one month after the workshops took place. We exploited features of the encouragement design that allow us to determine the effect of randomly mobilizing citizens to attend the Boîtes session, the direct effects of attending the session, and the downstream effects of the intervention.

Our findings have important implications for our theoretical understanding of how interventions related to mass democratic orientations affect target populations in emerging democratic contexts. The results are consistent with the conclusions reached in previous research that civic education interventions have strong informational effects, in this case on domain-specific political knowledge. The gains in knowledge presented here — among the largest registered in civic education research — and gains in empowerment seen in several previous studies (e.g., Fafchamps and Vicente 2013; Finkel et al. 2012), should not be minimized, given the demonstrated impact of those orientations on mass political participation and general engagement with the political process.

The results from the downstream attitudinal models represent an important refinement of previous research in the civic education and public opinion literatures. We find that it is possible for civic education interventions to influence attitudes through its impact on domain-specific knowledge. This, however, is contingent on the multidimensionality of political attitudes: it can have a positive impact if attitudes reflect abstract assessments whereas it can have a negative impact if they reflect evaluations grounded in political reality. Moreover, domain-specific knowledge appears to have a much weaker effect on more entrenched values such as political tolerance and national versus tribal identification. This is consistent with the idea that certain political attitudes change very slowly and mainly in response to macro-level trends (Almond and Verba 1963). The differential effects on attitudes and democratic values

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\(^6\) The endogenous variable in the downstream models is continuous (i.e., changes in decentralization knowledge) with range of –5 to 6. Therefore, we normalize the first-stage estimates to range from 0 to 1 in order to have an effect that is comparable to the support of γ.
should be taken into account in the overall assessment of civic education’s effectiveness, and they also provide evidence against the notion that increasing knowledge about potentially contentious political processes—such as the ongoing decentralization process in the DRC—will translate readily into support for those processes among ordinary individuals.

The findings presented in this paper are closely related to a growing experimental literature examining the effects of information on electoral accountability in developing countries (See Pande 2011). This stand of research examines the ways in which providing voters with information about incumbent performance, about the importance of voting in elections, and about the costs of electoral malpractice influence voting behavior and demand for accountability. These studies not only expand the range of outcomes that civic education may be expected to influence, but also highlight the importance of linking specific information contained in civic education messages to the specific behaviors that the information is designed to elicit. Our paper joins this emerging research in that it represents an attempt to ascertain whether and why increased knowledge and information gained from civic education exposure —shown above to be among the strongest and most consistent impacts found in nearly all of the studies conducted thus far—can then produce attitude change. Moreover, examining more specific civic education initiatives and its particular effects is a significant departure from the “traditional” evaluation model assessing the impacts of broader democracy and constitutional awareness programs on more general democratic orientations and values.

Finally, we argue that future research should continue to refine the experimental designs necessary to make more credible causal inferences about program effects. The encouragement design we adopted enabled us to estimate the direct effect of the VOICE program as well as to estimate the downstream effect of the intervention. Still challenging, though, is to adapt this research design to test for the strong effects found in previous observational studies for the frequency of exposure, the kinds of pedagogical techniques utilized, and the quality and competence of workshop facilitators in conditioning the impacts of civic education programs (e.g., Finkel and Ernst 2005; Finkel and Smith 2011). As more civic education studies are conducted along these lines in countries at various stages of democratic development, the full range of direct, downstream, and conditional effects of these interventions in fostering civic engagement, competence, and supportive democratic orientations among ordinary citizens will become increasingly clear.

References


This appendix provides: a table describing the research sites (Section I), and a list of the variables used in the study, including the survey question wording, response categories, and scale reliability coefficients where applicable (Section II).

I. Selection of Research Sites
Table SA1 shows the final sample of research sites included in the study, with substituted villages highlighted in boldface. The date in which the Boîtes à Images event took place in each village is also provided.

<table>
<thead>
<tr>
<th>Territoire</th>
<th>Groupement</th>
<th>Village</th>
<th>Event Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oshwe</td>
<td>Badjakamba</td>
<td>Nkole Etat (Pop. 812)</td>
<td>8/21/11</td>
</tr>
<tr>
<td>Idiofa</td>
<td>Ebiala</td>
<td>Ebiala Kandolo (Pop. 1,325)</td>
<td>7/25/11</td>
</tr>
<tr>
<td>Bagata</td>
<td>Mbaya Salikoko</td>
<td>Mbaya (Pop. 347)</td>
<td>7/23/11</td>
</tr>
<tr>
<td>Bulungu</td>
<td>Nkata</td>
<td>Kwanga Mulungu (Pop. 646)</td>
<td>6/22/11</td>
</tr>
<tr>
<td>Gungu</td>
<td>Lozo Munene</td>
<td>Kalumbu (Pop. 435)</td>
<td>7/16/11</td>
</tr>
<tr>
<td>Masi Manimba</td>
<td>Bangalala</td>
<td>Mutulu (Pop. 343)</td>
<td>6/12/11</td>
</tr>
<tr>
<td>Kasongo Lunda</td>
<td>Pelende</td>
<td>Munganda (Pop. 522)</td>
<td>8/7/11</td>
</tr>
<tr>
<td>Inongo</td>
<td>Mbelo</td>
<td>Ilungu (Pop. 328)</td>
<td>9/3/11</td>
</tr>
</tbody>
</table>

II. Survey Instrument, Variables, and Scales
The survey instrument included questions relating to decentralization, the main theme of the VOICE program and of the Boîtes à Images sessions. Key questions relate to individuals’ knowledge, attitudes, and opinions about decentralization policy and the decentralization process in the DRC. Other questions relate to individuals’ political tolerance and tribal identification. The survey instrument also asked basic demographic information. The questionnaire was developed originally in English and translated into French by personnel of the Congolese survey company BERCI and verified by a native French speaker. The final questionnaire was translated into two local languages, Lingala and Kikongo, for administration in the field.

Overall Decentralization Knowledge. Respondents were asked two general and four specific questions about knowledge of the decentralization process in the DRC.

General decentralization knowledge:
1. Do the decentralization laws give more power to the central government in Kinshasa, less power to the central government in Kinshasa, or does it not change the amount of power the central government in Kinshasa has?
2. Do the decentralization laws give more power to the local and Provincial governments, give less power to the local and Provincial governments, or does it not change the amount of power the local and Provincial governments have?

Specific decentralization knowledge:
1. Do you happen to know how many provinces there are to be in the country, including the city of Kinshasa, once the laws about decentralization are passed? Is the number less than 10, between 10 and 20, between 20 and 30, or more than 30? [CORRECT ANSWER: 26]
2. The laws about decentralization have created smaller units within each province that are called Entite Territoriale Decentralisée or ETD. One of these entities is la Chefferie. Do you happen to know who makes the laws for la Chefferie? [CORRECT ANSWER: le Conseil de Chefferie]
3. Decentralization has also changed the way that provinces and local governments get money to provide services for the people. Some of the money is supposed to come from local taxes, while some is supposed to come directly from the central government in Kinshasa. Think about a scale that runs from 0 to 100. If 0 means that none of the money for local governments comes from the central government in Kinshasa, and 100 means that all of the money for local governments comes from Kinshasa, could you tell me what share of the money for local governments you think is supposed to come from Kinshasa? [CORRECT ANSWER: 40%]
4. Have you ever heard of something called the “Caisse Nationale de Péréquation?” If yes, “is the Caisse Nationale de Péréquation something that is supposed to give money for people who don’t have enough food to eat”, “give money to village chiefs to settle land disputes and other problems in the villages,” “give money to local governments to support development projects” [CORRECT ANSWER], or “give money to returning combatants from the war to help them start new lives” We summed respondents’ correct answers to create a scale ranging from 0 to 6 with a scale reliability coefficient of .48 (pre-treatment) and .65 (post-treatment).

Positive Decentralization Considerations. The survey instrument included three questions related to positive views of the decentralization process: (a) Decentralization will be good for the country because the local governments will be more able than the Kinshasa Government to find solutions to the population; (b) Decentralization will be good for the country because the DRC is too big to be controlled by the central power only; (c) Decentralization will be good for the country because it will give more control to ordinary citizens on economic development; Responses for these items were scored as “1” for “strongly disagree” to “4” for “strongly agree.” One item also measured respondents’ general support for decentralization by asking respondents the extent to which they agreed or disagreed with the following assertion: “In general, I support the decentralization process in the DRC.” Responses were scored as “1” for “strongly disagree” to “4” for “strongly agree.” We created an index of support for decentralization using these items with a scale reliability coefficient of .68 (pre-treatment) and .65 (post-treatment).

Negative Decentralization Considerations. The survey instrument included questions on the extent to which respondents agreed or disagreed with the following statements: (a) Decentralization is not a good thing for the country because it will generate more conflict than economic and political resources; and (b) Decentralization is not a good thing for the country because it will bring more corruption by authorities than before. Responses were scored as “1” for “strongly disagree” to “4” for “strongly agree.” We reverse coded both items and created a scale referring to how optimistic individuals were about decentralization with a scale reliability coefficient of .53 (pre-treatment) and .67 (post-treatment).

Net Decentralization Considerations. We created an indicator of “net” considerations about decentralization by subtracting the negative considerations scale from the positive considerations scale.

Support for the Decentralization Process in the DRC. We measured support for the process of decentralization in the DRC by asking respondents the extent to which they agreed or disagreed with the
following assertion: “In general, I support the decentralization process in the DRC.” Responses were scored as “1” for “strongly disagree” to “4” for “strongly agree.”

Political Tolerance. We included a battery of questions testing respondents’ willingness to extend basic political rights to “people whose ideas are considered bad and dangerous.” Respondents were asked whether (1) a person who does not like their tribe should be allowed to participate in political activities of the village, and (2) a person who would abolish elections and install a military dictatorship should be allowed to participate in elections. The questions were scored from “1” for “strongly disagree” to “4” for “strongly agree.” We averaged the two items to create a scale with a reliability coefficient of .61 (pre-treatment) and .71 (post-treatment).

National versus Tribal Identification. We asked individuals to assess their identity as Congolese versus that of a particular tribe or ethnic group. We first asked respondents, “What is your tribe,” and then asked them: “Suppose you have to choose between being Congolese and be a (TRIBE). Which of the following statements best expresses your feelings? “I just feel Congolese,” “I feel more Congolese than (TRIBE),” “I feel equally Congolese and (TRIBE),” I feel more (TRIBE) than Congolese, and “I feel only (TRIBE).”