Democracy, governance and randomised media assistance

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BBC
MEDIA ACTION
TRANSFORMING LIVES THROUGH MEDIA
AROUND THE WORLD

Contents

Foreword by BBC Media Action

BBC Media Action aspires to be an evidence-based organisation. This means our work to support media to improve people's lives cannot be based on good ideas alone. Instead it needs to be rooted in an understanding of our audiences, and of what works and does not work. The result of this is a strong organisational focus on research, evaluation and learning.

What constitutes good evidence is currently subject to intense debate within the international development community. There is particular interest in making greater use of experimental and quasi-experimental research methods to assess the effect and impact of development interventions.

This paper is intended to help BBC Media Action understand the extent to which experimental and quasi-experimental methods have been used to evaluate the impact of media and media assistance on governance outcomes. It will support the BBC Media Action Research and Learning team to work out whether, when, how and why to use experimental and quasi-experimental methods in the future, as well as what to expect. Research and Learning at BBC Media Action has previously used a combination of quantitative and qualitative research approaches. This has included quantitative research surveys that compared the experiences of those exposed to the programmes we produce with those not exposed, as well as qualitative focus group discussions, community assessments and in-depth interviews. BBC Media Action has yet to use randomised control trials (RCTs), but the Research and Learning team is considering the research questions and contexts that might lend themselves to this method, while taking into account value for money.

BBC Media Action is very grateful to Devra Moehler of Annenberg School for Communication in Philadelphia for writing this working paper and for reviewing existing experimental research in the domain of media, communications and governance. BBC Media Action made a financial contribution to a field experiment conducted by Devra Moehler exploring the effects of partisan and neutral radio in Ghana; papers based on this research are forthcoming.[1]

This working paper summarises how experimental design has been used to assess the effectiveness of governance interventions and understand the effects of the media on political opinion and behaviour. It provides an analysis of the benefits and drawbacks of experimental approaches and also highlights how field experiments can challenge the assumptions made by media support organisations about the role of the media in different countries.

The paper highlights that – despite interest in the use of RCTs to assess governance outcomes- only a small number of field experiments have been conducted in the area of media, governance and democracy.[2] The results of these experiments are not widely known among donors or implementers.

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[1] For a working paper based on this research, see Jeffrey Conroy-Krutz and Moehler, Devra C (2013) *Moderation from Bias: A Field Experiment on Partisan Media in a New Democracy*. Working Paper. Available from 16 September 2013 at: http://www.asc.upenn.edu/faculty/Faculty-Bio.aspx?id=177

[2] See, for example Gisselquist, RM and Niño-Zarazúa, M (2013) *What can experiments tell us about how to improve governance?* UNU-WIDER (2013/077). Available from: http://www.wider.unu.edu/publications/working-papers/2013/en_GB/wp2013-077/ [Accessed 2 September 2013]

The paper shows that media initiatives have led to governance outcomes including improved accountability. However, adverse effects are also frequently detected. The studies conducted to date have been confined to a small number of countries and the research questions posed were linked to specific intervention and governance outcomes. As a result, there is a limit to what policy-makers and practitioners can infer. While this paper highlights an opportunity for more experimental research, it also identifies that the complexity of media development may hinder the efficacy of experimental evaluation. It cautions that low-level interventions (e.g. those aimed at individuals as opposed to working at a national or organisational level) best lend themselves to experimentation. This could create incentives for researchers to undertake experimental research that answers questions focused on individual change rather than wider organisational and systemic change. For example it would be relatively easy to assess if a training course does or does not work. Researchers can randomise the journalists that were trained and assess the uptake and implementation of skills. However, it would be much harder to assess how capacity building efforts affect a media house, its editorial values, content, audiences and media/state relations.

Designing such experiments will be challenging. The intention of this working paper is to start a conversation both within our own organisation and externally. As researchers we should be prepared to discover that experimentation may not be feasible or relevant for evaluation. In order to strengthen the evidence base, practitioners, researchers and donors need to agree which research questions can and should be answered using experimental research, and, in the absence of experimental research, to agree what constitutes good evidence.

BBC Media Action welcomes feedback on this paper and all research papers published under our Bridging Theory and Practice Research Dissemination Series.

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1. Introduction

In recent years, the use of field experiments to study the impact of development assistance on democracy and governance outcomes (DG outcomes) has grown tremendously. However, most of the DG field experiments[3] conducted to date focus on only a few sectors, namely elections, community and local governance, and service delivery (Moehler, 2010). Experimentalists have largely overlooked other DG sectors, such as media development assistance.[4] This paper investigates the potential for field experiments to contribute to our understanding of the intersection between media, democracy and governance. It reviews the small body of pioneering field experiments on media and political development, and it outlines some of the obstacles to conducting and learning from field experiments in this sector. Finally, the paper suggests opportunities for building a body of experimental evidence that can inform DG interventions in the media assistance sector.

This paper focuses attention on randomised field experiments in the developing world that explicitly address the use of media to achieve DG outcomes. It concentrates on the opportunities and challenges of field experiments, under the assumption that field experiments should be viewed as a complement to, rather than a replacement for, other methods. Typically, a multi-method approach yields a more useful evidence base for understanding development issues.

The paper is divided into six sections. The first section describes the growth of DG assistance and the increasing interest in DG field experiments.[5] The second section describes the domain of media assistance targeted at DG outcomes. The third provides an overview of current experimental and quasi-experimental studies on the intersection between media, democracy and governance. The fourth and fifth sections describe some of the challenges to successfully employing field experiments to inform media assistance programmes. The final section concludes by arguing for the benefits of practitioner-academic collaborations that provide experimental evidence about the influences on as well as the effects of media content related to democracy and governance.

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[3] Although field experiments have gained some popularity as a means for evaluating development assistance, their usefulness is controversial. There is a longstanding and animated debate about whether randomised controlled trials are superior or inferior to other methods for evaluating and informing development assistance programmes (for example, see: Banerjee and Duflo, 2008; Deaton, 2010; Duflo, 2004; and Ravallion, 2009). This paper does not stake out a position in this debate. Rather, the starting point for this paper is that field experiments are one potential tool among many in an evaluator's toolkit. In order for a tool to be useful, the user must be able to envision how that tool might function with respect to different problems and conditions. The author hopes to expand the evaluator's toolkit by describing how field experiments have already been used to study media, and by discussing the opportunities and obstacles in the use of field experiments in the media sector. Field experiments are thought of as an addition to the diverse array of available methods, rather than as a replacement for alternative approaches. The usefulness of each tool ultimately depends on the specific research question and setting under consideration. Furthermore, the use of multiple tools is usually superior to the use of only one.

[4] For the purposes of this paper, the author uses media development assistance and media development interchangeably and draws on a definition provided by Kaplan 2012 (see section two for definitions). For Media Action this includes work to support the development of the media as well as working with media and communication to achieve governance outcomes.

[5] In this paper all field experiments of development assistance with DG intervention and/or outcomes are referred to by the shorthand title "DG field experiments".

Box 1: Field Experiments

In this paper, the term "field experiment" refers to an experiment conducted in a real-world setting (sometimes called a naturally occurring environment), as opposed to in a laboratory. According to this definition, randomised controlled trials (RCTs) are also field experiments if they are conducted in real-world settings, as are most RCTs used to study development interventions. Experiments allow researchers to reliably attribute outcomes of interest to interventions under investigation within the study. In a simple experiment, individuals or units are randomly assigned to a treatment group that receives the intervention, while individuals randomly assigned to a comparison or control group do not receive the intervention. Random assignment creates comparable groups that are, on average, expected to be statistically equivalent to one another, given appropriate sample sizes. The only expected difference between the two groups is the presence of the intervention, so the comparison group provides a valid estimate of the counterfactual – what would have happened in the absence of the programme. The impact of the programme on the outcome being evaluated can be measured by comparing across the treatment and comparison groups. Field experiments provide greater external validity than lab experiments to the extent that they provide a closer approximation of naturally occurring interventions and environments.

2. Background on DG field experiments

Since the 1980s DG-focused programmes have proliferated at an ever increasing rate. Governments, international financial institutions, multilateral bodies and international and domestic non-governmental organisations provide assistance targeted at inducing democratic transitions in authoritarian polities, consolidating democracy where it exists, and increasing government effectiveness, transparency and responsiveness to citizens across all regime types. Donors currently support explicit efforts to expand press freedom, support professional journalism, enhance service delivery, strengthen democratic culture, facilitate free and fair elections, reduce corruption and improve upon a myriad of other DG goals (Gershman and Allen, 2006). Unfortunately, systematic evidence on the political impact of development assistance lags behind the rapid growth of DG-related development programming. The dearth of evaluations in the DG domain makes it hard for development practitioners to refine their programming, target resources appropriately, improve accountability and ward against doing harm.

There is growing interest in and enthusiasm for employing field experiments to study the effects of DG focused programmes. A vibrant research community at the intersection of evaluation and political development is attracting a new cohort of practitioners and scholars. Key donor agencies – such as the US Agency for International Development (USAID), the UK's Department for International Development (DFID) and the World Bank – are supporting randomised controlled trials in the hope that robust evidence of impact will inform programme decisions and justify resource allocations (Savedoff, Levine and Birdsall, 2006).

The vast majority of DG field experiments are concentrated within the sectors of elections, community and local governance, and service delivery. Moehler (2010) conducted a review of 41 completed or ongoing DG field experiments in 2009. At the time, approximately one-quarter of the DG field experiments were on elections, one-quarter were on community-driven development and one-quarter were on public service delivery and governance. The remaining quarter were distributed across a range of topics, such as gender quotas for government officials, conflict mitigation and media (Moehler, 2010). Many new field experiments have been initiated since that time. While a thorough canvassing of work in progress would be needed to make definitive statements about trends, casual observation suggests that these areas of concentration remain, although the distribution has probably changed. There seem to be fewer new projects on community-driven development, and many more on elections and local governance. Nonetheless, there are large swaths of activity in the DG field that are not under experimental investigation as yet.[6]

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[6] For additional reviews of field experimental work in the DG sector, see: Humphreys and Weinstein (2009) and De La O and Wantchekon (2011).

3. Background on media development assistance and evaluation

Media development assistance is one DG sector that has not received much attention from experimentalists. The earlier review identified only one published field experiment on media assistance in 2009 and a handful more in progress (Moehler, 2010), despite the fact that media development assistance is an important and multi-faceted sector within DG programming. This review identified nine field experiments completed or in progress to date. Before reviewing these nine studies, this paper provides some background on media assistance programmes targeted at DG outcomes.

Kaplan defines media development as "activities aimed at strengthening the media to be independent, pluralistic, and professional" (Kaplan, 2012, p. 6). These activities include increasing citizen engagement with the media, training media professionals, improving journalism schools, financing independent news organisations, supporting professional associations, teaching business and management skills, building a supportive legal and regulatory environment, protecting press freedom and reforming state broadcasters. Most media development programmes are predicated on the belief that independent, diverse, fair and accurate media will facilitate liberal democracy, free speech, peace, good governance and citizen empowerment (Arsenault and Powers, 2010; Arsenault et al., 2011; Kaplan, 2012).

Like other sectors of DG programming, media assistance has grown rapidly in recent years.[7] However, it is a relatively new and small sector within the development community overall. Media assistance comprised an estimated 0.4% of total US foreign assistance in 2011, with over half of that expenditure going to training and direct assistance (Kaplan, 2012, p. 17). The major donors of media assistance in 2010 included the United States ($222 million) (£142 million); European Union institutions (about $80 million) (£50 million); the United Kingdom ($45 million) (£29 million); the Netherlands ($40 million) (£26 million); Switzerland ($35 million) (£22 million); Unesco ($33 million) (£21 million); Sweden ($26 million) (£17 million), as well as France, Germany, Denmark, Norway and Canada (Kaplan, 2012, p. 16-18).

These donors and their media development partners are under increasing pressure to provide rigorous evidence of programme effects (Arsenault et al., 2011; Sommerfeldt, 2012; Gagliardone, 2010; Alcorn et al., 2011). Considerable effort is being devoted to improving research practices and to identifying promising new research methods. The goal is to create a rigorous and multi-method approach to evaluation of media development assistance programming to inform funding allocation and programme choice (Arsenault et al., 2011; Sommerfeldt, 2012; Gagliardone, 2010; Alcorn et al., 2011; Burgess, 2010). While there is recognition that field experiments might be one part of a multi-method approach, field experiments are viewed with some ambivalence by many in the media assistance community (Arsenault et al., 2011; Gagliardone, 2010; Alcorn et al., 2011). As of yet, only a small number of relevant field experiments have been conducted and the results of these studies are not widely known among donors or media development practitioners. A review of these and related studies may help to reveal the promise and current limits of employing field experiments to evaluate media assistance programmes targeted at DG outcomes. Hopefully, this review of extant

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[7] Kaplan estimated that media assistance from the US grew by two-thirds between 2007 and 2011 (2012, p. 16).

studies will also serve as a springboard for imagining new experimental and non-experimental approaches, including quantitative and qualitative methodologies.

4. Current experiments and quasi-experimental studies on media in developing countries

Many of the existing field experiments do not fit the classical model of a programme evaluation but they do offer important methodological and empirical lessons for media development practitioners engaged in evidence-based programming. This section of the paper briefly describes both the research designs and the substantive results, to the extent that they are available. Due to the small number of field experiments conducted to date, it also describes a set of analogous quasi-experiments that suggest new ideas for experimentation.[8]

4.1 Field experiments

There are two overarching topics of investigation within the current body of field experiments. One set of studies evaluates media-based development interventions targeted at DG outcomes such as informed civic engagement, governance, tolerance and intergroup cooperation. The other set of studies examines the impact of naturally occurring media content rather than specially designed media interventions. Studies in this second set employ experimental designs to isolate the independent effects of organic media sources.

With respect to the first set, several field experiments evaluate information provision initiatives on elections and elected officials. These studies are predicated on the idea that informing voters leads to better governance (Pande, 2011). Banerjee et al. (2011) tested whether a newspaper initiative about legislative candidates would increase informed voting. Within Delhi, India's national capital, 200 slums were randomly assigned to the treatment condition and 575 to the control condition. In the run-up to elections, residents in the treatment locations received free newspapers containing information (obtained through disclosure laws) on the performance of incumbent legislators and the qualifications of candidates.[9] Comparison of the treatment and control slums indicated that the newspaper initiative increased turnout, as well as the vote share for better performing and more

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[8] All the studies reviewed here involved academics in the fields of communication, political science, economics and psychology. This is not a comprehensive review of all relevant research. This paper presents only a small illustrative set of quasi-experiments from a much larger population of studies (Sanjukta, n.d.). While attempts were made to include all the field experiments at the intersection of media, democracy and governance, there are certainly others which were not identified. Particularly, this paper does not review studies conducted by development practitioners and donors without the involvement of academics. The selection of studies is not a statement about research quality or usefulness based on authorship. Instead, it was driven by logistics. Evaluations conducted by development practitioners are not easily located and/or publicly available to outsiders. Rather than providing an incomplete description of research by development practitioners, the study is explicitly restricted to works conducted (at least in part) by academics.

[9] Prior to the newspaper distribution, subjects only in the treatment slums received a pamphlet reporting that they would soon receive a free newspaper. The pamphlet described the report card, detailed legislator responsibilities and encouraged subjects to make informed vote choices. The treatment effect is that of receiving the pamphlet plus the newspaper.

qualified incumbents. The initiative also reduced cash-based vote-buying. Additional evidence suggests that voters only reacted to performance information along dimensions that had a clear and direct connection to their well-being.[10] In short, the evidence shows that a newspaper initiative targeting poor voters induced changes in electoral behaviour that are thought to improve legislative accountability.

In a similar study, Aker et al. (2013) tested whether a voter education intervention in Mozambique disseminated via mobile phones and a free newspaper increased informed voting and decreased electoral malfeasance. Polling stations were randomly assigned to a control condition or one of three interventions: SMS-based voter education and mobilisation initiative; publication of an SMS hotline for reporting electoral misconduct; and distribution of a free newspaper which contained the education and mobilisation campaign material as well as the hotline information.[11] Although the newspaper was the highest circulation paper in the country, pre-experiment distribution was limited to the city Maputo. The newspaper treatment extended distribution of the paper to individuals in the randomly selected newspaper treatment locations who previously did not have access. The researchers found that all three of the treatments increased voter turnout (as measured by both official election results and survey data) as well as political knowledge (as measured by survey questions).[12] The newspaper treatment also increased demands for accountability and reduced the occurrence of electoral problems that could be detected by independent observers. The field experiment provides reliable evidence that the media initiatives, especially the newspaper initiative, delivered many of its intended democratic benefits, namely it increased informed citizen participation and improved accountability.[13]

In contrast, a third field experiment documented unintended and harmful consequences of an online intervention designed to increase legislative transparency in the single-party state of Vietnam. Malesky et al. (2012) cooperated with the highest profile online newspaper to post detailed information about 144 randomly selected National Assembly delegates. The treatment drew over 1.3 million page views and over 800,000 hits to specific delegate pages containing legislative transcripts and performance scorecards. These were impressive output numbers, but the outcomes

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[10] Data was obtained from: official polling-station electoral returns to measure turnout and vote share; surveyor observations on the eve of the election to measure vote-buying; and opinion surveys and a detailed spending and public service tracking study to measure specific decision criteria.

[11] This project involved a collaboration between the academic researchers, the newspaper @Verdade (http://www.verdade.co.mz/) and Observatorio Eleitoral, a consortium of eight Mozambican non-governmental organisations.

[12] Additionally the study revealed that incumbents were more likely to benefit from the voter mobilisation, which would not be a desirable outcome if incumbent performance was low.

[13] Another related study is in progress (Casey et al., 2013). Data has been collected but not yet analysed. The project asks whether structured candidate debates increase voting for better qualified candidates and, as a result, public sector performance. Prior to the 2012 parliamentary election in Sierra Leone, 14 out of 28 competitive constituencies were randomly assigned to receive the treatment. The researchers, together with Search for Common Ground, organised interparty debates between parliamentary candidates from the treatment constituencies. Videotapes of the debates were publically screened in a sample of polling stations within the targeted constituencies, and an estimated 19,000 people saw the debates. A separate set of treatment arms was conducted to determine the effects of different elements of the debate treatment. The outcomes of interest (vote totals, voter knowledge, engagement and behaviour) will be measured with official electoral data and exit poll responses.

were the exact opposite of the project goals. Delegates of constituencies with higher internet penetration were more likely to curtail their legislative participation and conform to regime-supporting behaviours when under online scrutiny, than under the status quo. Furthermore, delegates who were more outspoken and critical of the one-party state were less likely to be re-elected when their democracy-promoting behaviours were made public. In this case, transparency through the internet had the undesirable effect of making legislators less active and independent. While the first two experiments indicate that exposure to politically relevant media content can facilitate political engagement and government accountability at times, the third reveals that transparency initiatives can also have adverse effects.

The next set of studies investigates whether radio interventions can help to reduce intergroup prejudice and conflict. Paluck (2012), in collaboration with the non-governmental organisation La Benevolencija, conducted year-long field experiments in Rwanda and eastern Democratic Republic of Congo (DRC). In Rwanda, radio-listening groups were randomly assigned to hear a cassette-recorded soap opera about reconciliation and intergroup cooperation (the treatment condition) or a soap opera about health (the control condition). At the end of a full year of listening to the shows, the researchers conducted individual surveys, focus groups and role plays with individuals in both conditions. Analysis comparing the treatment and control groups revealed that that the reconciliation soap opera did not change listeners' prejudicial beliefs, but it did change social norms about typical or desirable conduct. For example, there was no change in the belief that intergroup marriage contributes to the peace, but there was a change in the prescriptive norm of whether parents should warn children against intergroup marriage. Importantly, changes in normative perceptions were accompanied by desirable behaviour change. For example, those exposed to the reconciliation programme were more likely to actively negotiate, openly express their opinions on sensitive topics and cooperate with others.[14] The results suggest programmes emphasising social norms are more likely to achieve behaviour change than those seeking to change personal beliefs (Paluck and Green, 2009; Paluck, 2009).

Whereas the field experiment in Rwanda documented favourable behaviour change, the field experiment in the DRC revealed undesirable outcomes (Paluck, 2010a). The DRC study tested the impact of a radio talk show that encouraged discussion about intergroup conflict and cooperation. The talk show was broadcast live to three randomly selected regions of the six included in the study.[15] The results indicate that the talk show successfully encouraged more discussions. However, survey respondents in treatment areas reported that discussions were more conflictual, and they expressed less tolerance for disliked groups, than in control areas. Compared to those in the control group, respondents exposed to the discussion-encouraging programme were also less likely to help disliked out-group members and they were more likely to cite grievances as the cause for

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[14] Behaviour was measured through unobtrusive observation of individuals as well as group dynamics during focus groups, role plays and negotiations over how to share a cassette player given to the group as a whole.
[15] A related soap opera on the topic of intergroup discussion was aired in all study regions, and the talk show was aired as an add-on segment in the randomly selected treatment areas but not in the control areas. The comparison under investigation is thus soap opera plus talk show (treatment) against soap opera only (control).

not helping (Paluck, 2010a).[16] In short, the radio programme encouraging discussion heightened tensions and intolerance rather than ameliorating conflict.

The divergent outcomes of the Rwanda and DRC radio initiatives to reduce intergroup tensions highlight the dangers of generalising from one type of programme in one country to all types of programming in all countries. Field experiments generate evidence with high internal validity, but as with all case studies, caution must be taken when extrapolating to other cases.

More recently, Paluck partnered with the National Democratic Institute to conduct an evaluation of a radio-based civic education project (Paluck et al., 2011). The experimental design integrates and elaborates on the previous two studies in that it enables evaluation of individual intervention formats separately, as well as in combination. Listening groups in Juba were randomly assigned to a no-intervention control group or to one of 12 different treatment groups, in which individuals were exposed to one or more of the following interventions over the course of a day: exposure to a radio drama segment; exposure to a radio information segment; involvement in moderated face-to-face discussions; or involvement in un-moderated face-to-face discussions. Six of the treatment groups were randomly assigned to hear programmes about democracy, elections and corruption, while the other six groups heard about women's rights, women as candidates and citizenship. The results indicate that discussion of the radio programmes increased learning. Discussion of the episodes on democracy improved democratic attitudes, but discussion of women's involvement in politics generated more negative attitudes about the subject. Additionally, discussion significantly affected behaviour: it increased levels of donating to and volunteering for civil society organisations, as well as reporting corruption.[17] Paluck's cumulative three-country theory-based research agenda provides the most promising strategy for building a sound body of evidence to inform development practices.

The field experiments discussed so far evaluate specific DG focused media assistance efforts. The next three studies were designed to isolate the everyday effect of naturally occurring media sources. The hope is that by better understanding the effects of common sources within the existing media environment, media development practitioners will have a better understanding of the undesirable aspects of media, which they should work to counter, and the desirable aspects, which they should seek to amplify.

In weak or non-democratic states, the internet is thought to inform citizens about governance deficits at home, and present more desirable alternatives from abroad. Many scholars and practitioners expect that greater internet access will mobilise citizens to demand democratic reform. Bailard (2012a; 2012b) conducted a series of field experiments to estimate the political effects of internet exposure in states with weak democratic institutions, namely Bosnia and Herzegovina, and Tanzania. In both experiments, Bailard offered free browsing time at internet cafés to a random sample of individuals. Responses to pre- and post-treatment surveys of individuals who did and did

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[16] Willingness to help was measured with a behavioural indicator of how much salt the respondents donated to out-group members in need. Spontaneous reasons for giving or not giving were post-coded to measure salience of grievances.

[17] Outcome measures come from recorded content of discussions among listening group members between radio segments, pre- and post-interventions surveys, and behavioural measures of donating to and volunteering with specific civil society organisations mentioned by the research assistants, and reporting corruption.

not receive free internet access indicate that exposure to the internet made subjects more critical of their weak democratic institutions. In Tanzania, however, subjects in the free internet access treatment group were less inclined to vote than subjects in the control group. From a normative perspective, the outcomes are mixed. More critical citizens can be advantageous for democratic development if they seek to hold leaders accountable for poor performance. However, prospects for development are hindered if dissatisfaction causes some citizens to drop out of the political process altogether, as seems to have happened in Tanzania.

Partisan media are often blamed for discord, intolerance and instability, but partisan media could also persuade citizens to reconsider and moderate initial positions by exposing them to alternative viewpoints. Conroy-Krutz and Moehler (2013) conducted a field experiment in Ghana's capital Accra to isolate the effects of exposure to political discussions on partisan or neutral private FM radio stations. *Tro-tros* (commuter minibuses) were randomly assigned to one of four conditions: passengers heard live talk radio from a pro-government, pro-opposition or neutral station, or were in a no-radio control. Passengers were interviewed after they disembarked from the *tro-tros*, and three behaviour measures were collected in addition to survey responses.[18] Analysis of survey results indicates that exposure to radio biased towards one's preferred party had no effect on partisan attitudes. However, exposure to broadcasts favouring the other party moderated partisan attitudes, indicating that subjects were persuaded by rival arguments. Partisan broadcasts also encouraged behavioural displays of national rather than partisan identity. Neutral political talk radio did not seem to have the salutatory moderating effect of partisan media. Rather than fuelling extremism, as most observers fear, the evidence suggests that partisan media induce moderation by presenting alternative perspectives and inspiring more favourable assessments of the opposing party. While these results are not necessarily generalisable to environments where particularly intense conflict has already widened and reified intergroup schisms, they do point to potentially important and unanticipated effects of partisan media in many newly liberalised media systems. When citizens – either through a lack of choice or through personal preference – are exposed to media biased against their predispositions,[19] they may be persuaded to shift their attitudes in the direction of the media bias, and adopt more moderate stances as a result.

Notably, a separate field experiment, conducted in a conflict-affected environment, provides consistent evidence: one-sided radio broadcasts from a political adversary decreased sectarianism. In 2012 a military junta seized power in Mali. Bleck and Michelitch (2013) leveraged a field experimental evaluation of a radio distribution programme in remote Northern Mali, to study the effect of radio

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[18] To measure displays of partisanship, respondents were asked to choose a gift; they could take one of two key rings displaying partisan colours and symbols or a key ring displaying the Ghanaian flag. To measure political participation, respondents were asked to respond by SMS if they wanted to sign a petition to be sent by SMS to the major parties later in the day. To measure ethnic discrimination, respondents were asked if they wanted to donate to ethnically identified orphans. Analysis has not yet been conducted on the last two behavioural measures, nor on the full set of survey responses designed to measure engagement, participation, ethnic discrimination, rejection of electoral malfeasance, and perceived legitimacy of democratic institutions and practices in Ghana.

[19] While the extent of exposure to media from the other side is a topic of debate with respect to the US, there are good theoretical and empirical reasons to expect that cross-cutting exposure is not uncommon in the US (Garrett, 2009) and developing countries (Conroy-Krutz and Moehler, 2013), although there is little relevant empirical research in the latter.

controlled by the new military leaders. Prior to the coup, they had distributed USAID-donated radios to women in, what turned out to be, villages on the border of government- and rebel-controlled territory. They had also conducted a baseline survey and focus groups prior to the coup, and they were able to collect several waves of new data following the coup. Due to the remote locations, the (junta-controlled) state radio broadcasts were the only ones available. By comparing individuals in villages with greater radio access (by virtue of the distribution programme) with individuals in villages with less access, they are able to isolate the effect of the junta's broadcasts on citizen attitudes and behaviours. In order to build their own legitimacy, the military junta strategically used the radio to broadcast patriotic music and repeated calls for national unity. The experimental evidence shows that greater exposure to pro-junta state-run radio heightened the salience of national identity and strengthened solidarity across ethnic cleavages. The evidence also indicates that exposure to state-run radio made listeners more likely to acquiesce to the junta's argument that elections should be delayed. Although the contexts and mechanisms at play in Ghana and Mali are quite different, in both cases citizens were persuaded by radio programming from political opponents. Furthermore, in both cases the persuasive effect of biased media was a moderation of sectarian attachments, rather than polarisation as is commonly feared.

Of the nine field experiments described here, six investigate media-based initiatives designed to increase electoral engagement, transparency, intergroup tolerance, civil discourse, public-minded behaviour, gender equality and democratic attitudes. The remaining three isolate the effects of naturally occurring media influences from the internet, private talk radio, and government-controlled radio. While the experiments revealed that media initiatives sometimes achieved targeted and expected outcomes, many also yielded unexpected (often detrimental) effects. Banerjee et al. (2011) and Aker et al. (2013) found that media initiatives, in India and Mozambique respectively, increased informed voting, which is thought to improve accountability. However, Malesky et al. (2012) found that an online transparency initiative in Vietnam decreased legislative actions thought to enhance accountability. Paluck (2010a) observed that a radio programme designed to increase tolerance achieved the desired changes in norms and behaviours (but not beliefs) in Rwanda, while a programme with the same goal decreased tolerance in the DRC. Paluck et al. (2011) learnt that a radio and discussion-based civic education initiative in South Sudan increased democratic attitudes and behaviours, but decreased support for women's involvement in politics. Bailard (2012a; 2012b) documented that internet exposure increased democratic attitudes in Bosnia and Herzegovina and Tanzania, but also decreased electoral participation. Conroy-Krutz and Moehler (2013) discovered that partisan media in Ghana decreased polarisation, while neutral political talk radio had no effect. Bleck and Michelitch (2013) also discovered that biased junta-controlled media in Mali increased unity sentiments, but also increased support for undemocratic policies favoured by the junta. These findings underscore the need to conduct additional tests of our assumptions about media effects. If our priors about how media affect DG outcomes are incorrect, then so too will be interventions which aim to work with the media to achieve DG outcomes.

4.2 Quasi-experiments

Field experiments are part of a more general set of evaluation methodologies that explicitly address the counterfactual (what would have happened in the absence of the intervention). This section of

the paper expands the scope of methods under investigation, but only slightly. It reviews a set of quasi-experimental studies that resemble field experiments in a number of respects. They are all country case studies with evidence from units that have been "treated", as compared to similar units that have not been "treated". Notably, all of these studies make use of exogenous sources of variation in exposure to the treatment, so that outcomes can reliably be attributed to the intervention. These quasi-experiments are much like field experiments, except that the sources of variation in treatments are generated by the context rather than by the experimenter (Dunning, 2012).

The quasi-experimental designs reviewed here cleverly make use of variation within countries or areas to study the effects of pluralistic and informative media on governance, service delivery and electoral outcomes, or the effects of hateful or nationalistic media on violence and extremism. There are a large number of multi-faceted quasi-experiments on media, and a full review is beyond the scope of this paper. The purpose for reviewing a select number of studies here is quite limited. They provide some clues as to how alternative field experimental designs might be constructed in the future.

One set of quasi-experimental studies addresses the question of whether press freedom and media penetration affect government accountability and service delivery. Besley and Burgess (2002) examine the link between media access and government responsiveness to citizens by comparing Indian states between 1958 and 1992. They showed that state governments in areas with high newspaper circulation and electoral accountability were more responsive to the needs of citizens suffering from floods and food shortfalls, such that calamity relief expenditures and public food distributions were more likely to reach their intended targets. Reinikka and Svensson (2011) evaluate whether an anti-corruption newspaper initiative in Uganda reduced theft of public funds. The initiative published budget information which helped citizens to monitor local officials' handling of a large education grant programme. They found that theft of educational grant money decreased faster in regions of Uganda with higher newspaper distribution. Ferraz and Finan (2008) test the effect of an anti-corruption information provision intervention in Brazil on electoral accountability. They found that corrupt politicians received less votes when audits were made public than when they were kept secret prior to the election. As in the Uganda study, the Brazil study makes use of uneven media penetration to test the effect of media amplification of the anti-corruption initiative. Ferraz and Finan showed that the effects of releasing audits were more pronounced in municipalities with local radio stations present to report on corrupt practices.[20] These three quasi-experimental studies suggest that media can, at times, increase government accountability and responsiveness by exposing poor performance.

Two other quasi-experimental studies suggest that community radio may not have salutary effects on governance. Boas and Hidalgo (2011) used data on community radio licence applications in Brazil to identify the causal effect of incumbency on control over media, as well as the effect of media control on vote outcomes in the next election. Results from matching and regression-discontinuity

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[20] The audit release was random and the part of the study that examines the main effects of audit release is experimental in nature. However, their conclusion that the effects of the audit were stronger in the presence of the media is based on non-random distribution of media.

analyses suggested that politicians exerted control over radio licence allocation, and that controlling local stations improved electoral outcomes for radio-controlling incumbents. In contrast to the previous three studies, which found that media curbed abuses of power, Boas and Hidalgo found that community radio entrenched local power brokers in Brazil. Keefer and Khemani (2011) found no evidence that community radio in Benin increased government accountability, although exposure did alter household financial decisions. Literacy rates among school children were higher in villages exposed to more community radio stations, but only because households invested more in education and not because of citizen engagement with officials nor government inputs into village schools. In both of these cases, there is no evidence that community radio improved accountability and in Brazil, it seemed to hinder accountability.

Two rigorous observational studies provide valuable evidence on the effects of hate radio in Rwanda, although they come to somewhat different conclusions about the role of Radio-Télévision Libre des Milles Collines (RTLM) in provoking killings. As part of a more general study of the determinants of participation in genocide, Straus (2007) analysed the range, timing and content of RTLM broadcasts and compared them to geographical and temporal patterns of killings, in order to gain leverage over the causal influence of radio. He also conducted interviews with perpetrators. Straus argues against the conventional wisdom that radio was a primary determinant of genocide. He concludes from his evidence that hate radio did not trigger or dictate the timing and direction of killings, although it may have bolstered the primary mobilising force (face-to-face recruitment) by articulating extreme positions, signalling who had power and setting a belligerent tone. In contrast, Yanagizawa-Drott (2010) employed a more precise measure of broadcast transmission based on the location of RTLM transmitters and local topography. He made use of Rwanda's many hills in the line of sight between radio transmitters and villages to compare similar (and geographically close) villages that did and did not have access to RTLM broadcasts by virtue of whether they were located on the signal-exposed or signal-blocked side of a hill. He found that the number of persons prosecuted for violent crimes committed during the genocide was considerably greater in the villages receiving RTLM radio signals than in similar villages without access. He concludes that hate radio broadcasts were responsible for an increase in violence during the genocide. It is possible that RTLM broadcasts in months prior to the conflict created a more receptive climate for violence (as Yanagizawa-Drott's evidence suggests) even if the most explicit and incendiary broadcasts occurred after the worst of the killing, and even if most perpetrators were mobilised to act by face-to-face communication and not by radio (as Straus's evidence suggests). RTLM may have created more fertile ground for violence without directly controlling the timing, trajectory or location of killing during the genocide.

DellaVigna et al. (2012) also evaluated the effect of hateful broadcasts. They examined the effect on ethnic animosity of nationalistic Serbian radio broadcasts that travel over the border into Croatia. They compared similar villages in Croatia that do and do not receive the cross-border radio signals from Serbia. Survey and election data revealed that Croatian villages with clear transmissions of Serbian public radio (intended for Serbian listeners in Serbia) were likely to have higher vote totals for extreme nationalist parties than villages with weak or no Serbian radio reception. Ethnically offensive graffiti was also more common in locations with Serbian radio access. The incendiary influence of chauvinistic media continues even a decade after the end of the war.

The last study reviewed here is unique in that it interrogates a cause rather than the effect of media content. Stanig (2013) studied the effects of a repressive legal environment on reporting about corruption in the Mexican press. Freedom of speech is regulated by the criminal code of each state in Mexico and Stanig exploited the subnational variation in legal frameworks to estimate how repressive defamation laws affect coverage of official malfeasance. He created a data set recording the number of articles alleging government corruption based on content analysis (the outcome of interest), paired with information on state-by-state defamation law (the cause). He finds that restrictions on media freedom have a chilling effect on the press. Corruption received significantly less media coverage in states with more repressive defamation laws.

These quasi-experimental studies make use of external sources of variation in media distribution, freedom and licensing to study the effects of certain types of media on audience attitudes and behaviours, as well as on the performance of government officials. Several pioneering studies make use of political access or media rules to study how the media environment affects media content. Boas and Hidalgo (2011) found that licensing procedures for community radio stations in Brazil were exploited by incumbents to entrench their power. Stanig (2013) found that restrictive media laws stifled critical reporting. Importantly, none of the field experiments conducted to date evaluates how media environments affect media outcomes.

5. Challenges of conducting field experiments on media development

Field experiments generate high internal validity because random assignment of units to treatment and comparison conditions limits confounding influences and helps to isolate the causal effects of interventions under investigation. However, conducting field experiments is also challenging, and the challenges often affect what kinds of programmes get evaluated experimentally, as well as the types of environments that receive the most attention from experimentalists. This section examines some of the biggest challenges of conducting field experiments, especially with respect to the media assistance sector. It focuses on three challenges: 1) level of intervention; 2) complexity of intervention; and 3) research planning under ambiguity.

5.1 Level of intervention

The level of intervention represents, perhaps, the biggest challenge to field experiments (and quasi-experiments). The precision of estimates depends on the treatment of many units, and the need for large numbers of units in experimental research pushes researchers to avoid evaluating high-level interventions in favour of low-level interventions.

The level of intervention ranges from low to high across different media development activities. Many media programmes target national institutions that apply to the country as a whole in a uniform manner. For example, legislative and regulatory reform is typically national in scope rather than regional or local. Programmes targeted at media institutions with national coverage, such as

state broadcasters, are also more challenging to evaluate with field experiments. Interventions that involve a larger number of media outlets, each with limited distribution, are more amenable to field experiments due to the larger number of outlets and the greater ease of identifying control areas and populations. Programmes that target individual journalists and other media professionals will also be easier to evaluate.

Experimental evidence will tend to accumulate where a large number of units are available. The exclusive focus on media effects in the existing body of experimental research is, at least in part, due to the fact that media exposure can (more easily) be randomised across a large number of individuals. It will require special ingenuity to develop experimental evaluations where the outcomes of interest are media outlets, institutions, laws, regulations, practices or content.

Such innovative studies are possible though. Even with programmes that are seemingly national in scope, there may be potential for creating subnational variation through what researchers in the field call encouragement designs. Many legal and regulatory changes require awareness, training, and resources before they are implemented or employed. For example, passage of a freedom of information act may theoretically benefit all journalists within a country, but only those journalists who are knowledgeable about the procedures for filing requests will be able to realise these benefits. Similarly, only those officials who think they will face penalties for non-compliance will make documents available. Training and enforcement programmes can be randomised across individuals, units and locations to study the effect of these laws on reporting and government performance.

Fortunately, good media development programming often includes these types of activities. Quality legal and regulatory reform programmes integrate programmes to encourage implementation and adoption. Evaluators can make use of the fact that many such activities are localised and can randomise which individuals, region or units receive this type of accompanying lower-level assistance in order to study the effects of higher-level programmes.

5.2 Complexity of intervention

Another challenge results from the complexity of DG programmes generally and media programmes specifically, which tend to combine many different activities targeted at a diverse array of beneficiaries. There are good reasons why programmes tend to include a bit of everything thought to affect target objectives; accumulated experience suggests that a holistic approach to development is beneficial, and sufficient evidence does not yet exist to allow practitioners to intelligently select from the range of possible actions. Regardless of the reasons, this multi-faceted approach to programming poses significant inter-related challenges to hypothesis testing. First, complex interventions tend to occur at multiple levels or with a variety of different target populations, making it difficult to decide on an appropriate frame for random assignment. At higher levels, the numbers of units are often too small to yield sufficiently precise estimates, and at lower levels, random assignment cannot capture the effects of higher-level interventions. Second, measuring outcomes is more difficult with complex interventions due to the diversity of targets. Third, if the field experiment is designed to measure the impact of the bundle of activities, then it can be hard to determine whether or not specific activities had an impact. Such an evaluation may not offer the precise evidence about cause and effect that is important for theory building and policymaking.

An enticing alternative is to test the effect of individual activities separately (and in differing combinations where possible). This is the strategy adopted by Aker et al. (2013). They studied the effect of information (SMS messages); participation opportunities (hotline information); and a combination of the two (newspaper access). It was also the strategy adopted by Paluck and her colleagues to study the effects of different programme formats through the experiments conducted in Rwanda, the DRC and South Sudan (Paluck, 2009, 2010a, 2012; Paluck and Green, 2009; and Paluck et al., 2011). Cumulatively across the first two studies, and integrated within the third, Paluck introduces variation in exposure: to soap operas, information provision initiatives and discussion, both individually and in combination.

Complex evaluations that test exposure to specific activities individually and in combination offer the best scientific method for studying complex programmes. Unfortunately, when programmes combine many different kinds of activities, the resources expended on each individual activity tend to be limited and the expected effect of each activity may be too small to measure. Furthermore, the number of treatment units involved in the typical intervention often prohibits separate tests of individual activities and various combinations of activities within the same programme. Attempts to simplify programmes to facilitate evaluation risk generating a body of evidence about atypical programmes. The same is true if researchers gravitate towards the study of simple programmes.

The problem of complexity may be more acute in the media assistance sector than in other DG sectors. In media development programmes, targeted beneficiaries are often embedded in organisational structures and environments that lead to greater spillover between treated and untreated individuals. This is especially true with respect to programmes involving media professionals. For example, field experiments that seek to compare media created by trained versus untrained journalists will likely run into problems because trained individuals are likely to share useful information with colleagues, which is a desirable outcome from a programming perspective but leads to biased estimates of effects if evaluators compare trained versus untrained journalists working within the same organisations. It is possible to cluster trainings and compare content between rather than within media organisations, but the evaluator may face a dearth of comparable media organisations. Furthermore, media professionals are often few in numbers and well networked across outlets in developing countries.[21]

5.3 Research planning under ambiguity

Programme objectives and activities, and the underlying development hypotheses, typically evolve over time and are only well specified once the implementation of the programme has begun (and sometimes not until after that). Planning and solicitation documents specify project goals and sometimes a series of illustrative activities to achieve those goals. Donors often encourage some flexibility so that the subject expertise of implementing partners can inform the programme design.

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[21] A related but different problem is that programmes that change the abilities and interests of one individual within an organisation may not lead to desired change in outcomes because the individual's actions are blocked by others. For example, a journalist trained in investigative reporting may produce a high-quality article exposing official corruption that is blocked or significantly altered by editors. A rigorous evaluation of the effect of training on media content would show the programme to be ineffective, though rightly so. A programme that does not address the various actors involved in the full process of producing media content is likely to be ineffective at delivering outcomes that actually improve democracy and governance.

After an award is made, additional changes and refinements to the programme are often allowed in response to early data collection and analysis. While flexibility can make for better programming, it poses considerable difficulties for the evaluator. It is difficult (and often impossible) to define an experiment when the objectives and activities, and the development hypotheses linking the two, are not well specified. It can be equally problematic to wait to design the study until after the programme parameters are fully clarified; the intense pressure to commence implementation as soon as possible leaves little time for adjustments and baseline data collection, and agreement can be harder to secure after awards are made. The result can be a disjuncture between the optimal research design and baseline data collected, on the one hand, and the eventual contours of the intervention under investigation, on the other. Measured impact may not reflect real impact due to suboptimal research designs given the actual interventions undertaken.

The challenge of research planning under ambiguity is especially acute in the media development sector. The growing and fast-changing use of new media technologies dramatically adds to the complexity of both media programming and evaluation. It is difficult for donors or practitioners to predict what technologies or strategies will be most popular in a year's time, let alone three or five years hence. As a result, media assistance increasingly requires flexibility, which complicates the work of evaluators, regardless of the methodology used. Not only do programmes need to adapt to rapidly changing environments, but so do communication theories of change. Evaluators seeking to conduct field experiments of communication interventions must work to be as creative and flexible in adapting to changing information environments as those they are evaluating. It may be that field experiments are ill suited for evaluation of programmes at the cutting edge of new technology use, where extreme flexibility is required.

While there are certainly other challenges to conducting field experiments in the media sector, the level of, complexity of and ambiguity of interventions are likely to be the most difficult issues.

6. Challenges to learning from field experiments on media development

The particular challenges of executing field experiments lead researchers to focus on certain types of interventions in certain types of cases. While a narrow research focus is not a problem per se, it can have two (potentially) problematic implications with respect to the ability of field experiments to inform media assistance programmes: 1) field experiments might fail to address certain questions, and even whole domains, that are of great interest to practitioners; and 2) the accumulation of experimental evidence from certain types of cases and not others can lead to distorted conclusions about what works and what does not if the parameters of the study cases are not taken into account when drawing policy lessons. Experimentation in the media development sector is still in its infancy, but there are already indications about the types of research questions, programmes and environments that are likely to receive the most attention from experimentalists. This section discusses these provisional tendencies in order to provoke more creative use of experimentation to address important questions, and more careful interpretation of findings in light of the evidence base.

First, the challenges of conducting field experimentation can limit the research and policy questions that can be addressed with the methodology. With respect to media assistance, all of the field experiments to date provide evidence of media effects. There is no experimental evidence on what influences the type of media that is produced, a question of great practical importance to media assistance practitioners.

Within the realm of DG and media assistance, media content is often an intervening variable between programme activities and the ultimate desired DG outcomes. For example, a training programme in investigative journalism might be designed to increase the quality of reporting on government malfeasance, with the ultimate aim of increasing accountability and service delivery. As another example, reform of state-owned media may seek to yield more even-handed coverage of candidates thus levelling the electoral playing field and increasing democratic competition. In these programmes, media is both an outcome of interest and a cause. Practitioners involved in media assistance are concerned with both the causes and the consequences of media. To date the experimental evidence (and nearly all the quasi-experimental evidence) addresses only the consequences of media exposure.

There may also be a bias against experimental evaluation of complex programmes and flexible programmes that adapt to changing media environments during the course of the evaluation. The challenges of conducting field experiments described above suggest that we are more likely to accumulate evidence on relatively simple and static programmes, than on more complex and continually evolving programmes. As is common with field experiments generally, there will probably also be more field experiments conducted in predictable environments than in unpredictable ones. For example, field experiments are especially challenging in areas experiencing violent conflict so there is unlikely to be much attention to questions of media assistance during war. The challenges of complexity, flexibility and instability might limit the questions that field experiments can help to answer.

Second, the current body of field experiments on media and DG cleverly make use of media or resource scarcities to create variation in media exposure. As a result, studies show some bias towards settings where media penetration is low, populations with limited means to access media on their own, and media outlets with limited reach. For example, Bleck and Michelitch's (2013) experiment was conducted in remote villages in Mali where radio ownership and control was still limited (especially for women), and Aker et al.'s (2013) study gathered data on newspaper effects in areas that lie outside of the normal newspaper distribution range. Bailard (2012a; 2012b) investigated the effect of internet access on populations that typically lack the resources needed to access the internet. Paluck (2010a) makes use of local broadcasts with fairly limited ranges in the DRC, and Boas and Hidalgo (2011) and Keefer and Khemani (2011) take advantage of localised community radio broadcasts in Brazil and Benin respectively. It would be problematic to assume that Bleck and Michelitch's (2013) findings generalise to wealthier urbanites who have access to multiple sources of information and entertainment. Similarly, the power of Aker et al.'s (2013) newspaper initiative may be diluted in settings where the newspaper is readily accessible year-round and media choice is greater. The resulting body of experimental evidence might tell us a great deal about interventions in remote areas, with disadvantaged populations, and small-scale media, but might be less useful for generalising to wealthy connected individuals who already have access to media they might want to

consume from both local and national or international sources. However, these tendencies are not absolute. Conroy-Krutz and Moehler (2013) were able to study media effects in Ghana's capital city, and Malesky et al. (2012) found effects in areas of Vietnam with the highest internet penetration. Nevertheless, some types of environments are likely to receive more attention than others, and the characteristics of the treatments and the study population must be taken into account when drawing policy lessons from the results.

The challenge of generalising from case studies is not unique to field experiments. Most evaluations of media assistance to date, regardless of methodology, are case studies. The specifics of the case must always be considered when drawing broader policy lessons. However, the issue (might) be more acute with respect to learning from field experiments, to the extent that the specific challenges of conducting field experiments (might) lead to evidence from a less diverse set of cases.

7. Solutions and opportunities

The attention to challenges in the previous sections should not obscure the immense opportunities at hand. Much can be learned about media and media assistance that can be of great use to practitioners if proper attention is given to the parameters of the evidence base. This paper highlights three main opportunities. First, field experiments are most likely to be conducted in areas of media scarcity, and such environments are often targeted by media assistance programming. There may be an organic convergence of research attention to and programming involvement in certain types of environments. Second, media assistance programmes are often based on assumptions about how media affects democracy and governance. Field experiments seem to be especially well suited to test assumptions about media effects and thus provoke greater reflection about programme goals and theories of change. Third, quasi-experimental and qualitative studies suggest that institutions affect media quality and ultimately democratic development. As yet, field experiments have not been conducted on the factors that influence media content and reach. Creative thinking and collaborative efforts between researchers and practitioners could yield robust experimental evidence testing extant theories about how media are shaped by legal, regulatory, economic and political environments.

First, most media development activities take place in locations characterised by scarcities. The experimental and quasi-experimental research projects described above harness these scarcities to create (or identify) variation in media exposure that is unrelated to individual predispositions. This allows researchers to distinguish the effects of media from what led individuals to consume the media in the first place, and to develop robust estimates of media effects. Limited newspaper distribution or broadcast range allows researchers to compare those with and without access to the media under investigation (for example, see: Aker et al. 2013; Paluck 2010a; Reinikka and Svensson 2011; Ferraz and Finan 2008; Keefer and Khemani 2011; Straus 2007; and Yanagizawa-Drott 2010). In addition, many individuals lack the resources to access media in private and they consume media in public or semi-public places where they have less control over what they watch, listen to or read. Conroy-Krutz and Moehler (2013) make use of the fact that drivers choose what passengers

consume on daily commutes to identify the effects of partisan radio consumption. Paluck (2009, 2010a, 2012) and Paluck et al. (2011) make use of the common practice of listening to radio in groups to randomise exposure to study the effect of programmes to reduce prejudice and increase democratic attitudes. Finally, many individuals lack the resources to consume certain types of media; Bleck and Michelitch (2013) and Bailard (2012a; 2012b) create variation in media exposure by randomising distribution of resources that enhance access to radio in Mali, or to internet in Bosnia and Herzegovina and Tanzania respectively.

Similarly, media assistance programmes often target locations where media penetration is incomplete, media access is unequal and resources are scarce. Such areas are most in need of assistance. Thus, researchers and practitioners may gravitate towards the same types of media environments. Certainly these are not the only settings where experiments are conducted, nor are they the only locations receiving assistance. Nonetheless, the areas or populations that garner the most attention from researchers may overlap considerably with those targeted by media assistance programmes.

Second, media assistance programmes typically rely on normative assumptions about how certain kinds of media affect audiences and governments. Field experiments are especially well suited for testing such assumptions. Media assistance programmes that successfully generate a certain kind of media environment or content could have adverse effects if our theories about what kinds of media benefit or harm democratic governance are incorrect. Practitioners can draw important lessons from field experiments when deciding what kind of media to promote.

Although experimentation in the media sector only began a few years ago, extant studies already have important implications for media development assistance programmes. Most notably, the results challenge conventional wisdom about the type of media content that facilitates democratic governance. Many media interventions seek to increase reporting on the performance of government officials because greater transparency is thought to increase accountability and representation. The results from Malesky et al.'s (2012) online news experiment in Vietnam contradict this assumption. They found that publication of information about legislators decreased legislative independence. Paluck's (2010a) evidence from the DRC calls into question assumptions about the benefits of encouraging discussion of sensitive issues in some contexts. Talk shows encouraging discussion seemed to produce more intergroup hostility rather than less. Paluck et al.'s (2011) field experiment in South Sudan showed that discussion about women's role in politics made individuals less favourable towards women's inclusion. Bailard's (2012b) evidence from Tanzania suggests that the internet may demobilise rather than mobilise citizens. Conroy-Krutz and Moehler (2013) provide evidence that partisan talk radio reduced rather than heightened divisions.

The experimental studies reviewed here provide some of the most robust evidence of media effects on DG outcomes of interest and they highlight the importance of testing assumptions about media effects. It is far too early to generalise from these limited number of case studies (no matter how good the internal validity) and wholesale rejection of conventional wisdom is premature. Additional experimental and non-experimental research is needed to understand the processes and conditions generating these unexpected results. Nonetheless, the existing evidence from field experiments

should give policymakers pause and provoke reflection about the theoretical underpinnings of current activities.

Third, a division of labour seems to be developing whereby experimental and quasi-experimental approaches are used (often by academics) to investigate media effects, and other evaluation techniques are used to study the effect of interventions on media content, institutions and practices. While this division of labour can be productive, it may also represent a missed opportunity. The best prospects for facilitating evidence-based programming may lie in bridging this divide so that experimental methods are employed to investigate influences on media in addition to effects of media. For example, one promising approach might be to randomise training programmes and compare articles or broadcasts produced by trained and untrained media professionals. Such a design could be replicated across settings given that media professional training programmes are the most common form of media assistance. Experimental evaluations could also be designed that encourage uptake of practices, adoption of norms, implementation of laws and enforcement of penalties in treatment groups but not in comparison groups. Free speech laws are typically not enacted at the subnational level as in Mexico (Stanig, 2013), but randomised training or assistance programmes could create variation in the application and enforcement of free speech laws. Boas and Hidalgo (2011) made use of already existing variation in approval of licences but randomised interventions directed at improving implementation of regulations could be employed to better understand the effects of media regulations on media content, practices and businesses.[22]

In sum, the handful of field experiments reviewed here already make an important contribution to our understanding of how media assistance might best be employed to foster democracy and governance. They provide robust results, from locations and populations that are often targeted for media assistance, that challenge common assumptions about media effects. Additional studies that probe media effects are needed to help media assistance practitioners to determine what kinds of media content they should try to foster and what kinds to discourage. Field experiments will yield even more insights if researchers and practitioners can collaboratively invent designs that provide evidence about the determinants of media content and practice. Ideally field experiments can be employed to study how interventions shape media content, alongside research on how media content affects audiences and officials. Field experiments would seem to add some value within a multi-method approach to evaluating media for DG interventions, although the ultimate contribution of the method depends on the ability of researchers to address creatively the distinctive advantages and challenges of the methodology.

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[22] Media content analysis offers one excellent tool (akin to the audience survey) for measuring the effect of randomised interventions on media content. The field experiments and quasi-experiments reviewed here use a variety of innovative approaches to measuring media effects (Paluck, 2010b). Field experiments on media outcomes will also benefit from innovation in measurement in tandem with innovation in research designs.

References

Aker, JC, Collier, P and Vicente, PC (2013) Is Information Power? Using Mobile Phones and Free Newspapers during an Election in Mozambique. Working Paper. Available from: http://www.pedrovicente.org/cell.pdf [Last accessed 25 August 2013]

Alcorn, J, Chen, A, Gardner, E and Matsumoto, H (2011) Mapping Donor Decision Making on Media Development: An Overview of Current Monitoring and Evaluation Practice. Washington, DC: Internews.

Arsenault, A and Powers, S (2010) Media Map Project Review of Literature. Washington, DC: Internews.

Arsenault, A, Himelfarb, S and Abbott, S (2011) Evaluating Media Interventions in Conflict Countries: Toward Developing Common Principles and a Community of Practice. Washington, DC: United States Institute of Peace.

Bailard, CS (2012a) Testing the Internet's Effect on Democratic Satisfaction: A Multi-Methodological, Cross-National Approach. Journal of Information Technology and Politics, 9:2, 185-204.

Bailard, CS (2012b) A Field Experiment on the Internet's Effect in an African Election: Savvier Citizens, Disaffected Voters, or Both? Journal of Communication, 62:2, 330-44.

Banerjee, A and Duflo, E (2008) The Experimental Approach to Development Economics. CEPR Discussion Paper No. DP7037.

Banerjee, A, Kumar, S, Pande, R and Su, F (2011) Do Informed Voters Make Better Choices? Experimental Evidence from Urban India. Working Paper. Available from: http://www.hks.harvard.edu/fs/rpande/papers/DoInformedVoters_Nov11.pdf [Last accessed 25 August 2013]

Besley, T and Burgess, R (2002) The Political Economy of Government Responsiveness: Theory and Evidence from India. The Quarterly Journal of Economics, 117:4, 1415-51.

Bleck, J and Michelitch, K (2013) Capturing the Airwaves, Capturing the Nation: Citizen Response to Putschist Controlled Radio. Working Paper.

Boas, TC and Hidalgo, FD (2011) Controlling the Airwaves: Incumbency Advantage and Community Radio in Brazil. American Journal of Political Science, 55, 869-85.

Burgess, J (2010) Evaluating the Evaluators: Media Freedom Indexes and What they Measure. Washington, DC: Center for International Media Assistance.

Casey, K, Glennerster, R and Bidwell, K (2013) The Impact of Voter Knowledge Initiatives in Sierra Leone. American Economic Review registry for randomized controlled trials [online]. Available from: https://www.socialscienceregistry.org/trials/26 [Last accessed 25 August 2013]

Conroy-Krutz, J and Moehler, DC (2013) Moderation from Bias: A Field Experiment on Partisan Media in a New Democracy. Working Paper.

De La O, AL and Wantchekon, L (2011) Experimental Research on Democracy and Development. In Druckman, JN et al. (eds.) Cambridge Handbook of Experimental Political Science (pp. 384-96). Cambridge: Cambridge University Press.

Deaton, A (2010) Instruments, Randomization, and Learning About Development. Journal of Economic Literature, 48:2, 424-55.

DellaVigna, S, Enikolopov, R, Mironova, V, Petrova, M and Zhuravskaya, EV (2012) Cross-Border Media and Nationalism: Evidence from Serbian Radio in Croatia. Available from SSRN: http://dx.doi.org/10.2139/ssrn.1808990 [Last accessed 25 August 2013]

Duflo, E (2004) Scaling Up and Evaluation. In Bourguignon, F and Pleskovic, B (eds.) Accelerating Development: Annual World Bank Conference on Development Economics (pp. 341-69). Washington, DC: World Bank; Oxford and New York: Oxford University Press.

Dunning, T (2012) Natural Experiments in the Social Sciences: A Design-Based Approach. Cambridge, UK: Cambridge University Press.

Ferraz, C and Finan, F (2008) Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes. The Quarterly Journal of Economics, 123:2, 703-45.

Gagliardone, I (2010) From Mapping Information Ecologies to Evaluating Media Interventions: An Experts Survey on Evaluating Media Interventions in Conflict Countries. Working Draft prepared for "Evaluating Media's Impact in Conflict Countries", Caux Conference Center, Switzerland.

Garrett, RK (2009) Politically Motivated Reinforcement Seeking: Reframing the Selective Exposure Debate. Journal of Communication, 59, 676-99.

Gershman, C and Allen, M (2006) New Threats to Freedom: The Assault on Democracy Assistance. Journal of Democracy, 17:2, 36-51.

Humphreys, M and Weinstein, J (2009) Field Experiments and the Political Economy of Development. Annual Review of Political Science, 12, 367-78.

Kaplan, D, ed. (2012) Empowering Independent Media: U.S. Efforts to Foster a Free Press and an Open Internet Around the World. Washington, DC: Center for International Media Assistance.

Keefer, P and Khemani, S (2011) Mass Media and Public Services: The Effects of Radio Access on Public Education in Benin. Policy Research Working Paper Series, The World Bank (5559).

Kern, HL and Hainmueller, J (2009) Opium for the Masses: How Foreign Media Can Stabilize Authoritarian Regimes. Political Analysis, 17:4, 377-99.

Malesky, E, Schuler, P and Tran, A (2012) The Adverse Effects of Sunshine: A Field Experiment on Legislative Transparency in an Authoritarian Assembly. American Political Science Review, 106:4, 762-86.

Moehler, DC (2010) Democracy, Governance, and Randomized Development Assistance. Annals of the American Academy of Political and Social Science, 628, 30-46.

Olken, BA (2009) Do Television and Radio Destroy Social Capital? Evidence from Indonesian Villages. American Economic Journal: Applied Economics, 1:4, 1-33.

Paluck, EL (2009) Reducing Intergroup Prejudice and Conflict Using the Media: A Field Experiment in Rwanda. Journal of Personality and Social Psychology, 96:3, 574-87.

Paluck, EL (2010a) Is it better not to talk? Group polarization, extended contact, and perspective-taking in eastern Democratic Republic of Congo. Personality and Social Psychology Bulletin, 36, 1170-85.

Paluck, EL (2010b) The Promising Integration of Qualitative Methods and Field Experiments. Annals of the American Academy of Political and Social Science, 628:1, 59-71.

Paluck, EL (2012) Media as an instrument for reconstructing communities following conflict. In Jonas, K and Morton, T (eds.) Restoring civil societies: The psychology of intervention and engagement following crisis (pp. 284-98). Chichester: Wiley-Blackwell.

Paluck, EL and Green, D (2009) Deference, Dissent, and Dispute Resolution: An Experimental Intervention Using Mass Media to Change Norms and Behavior in Rwanda. American Political Science Review, 103:4, 622-44.

Paluck, EL, Blair, G and Vexler, D (2011) Democracy promotion by radio: Experimental effects of listening and discussing in Southern Sudan. Working Paper.

Pande, R (2011) Can Informed Voters Enforce Better Governance? Experiments in Low-Income Democracies. Annual Review of Economics, 3:1, 215-37.

Ravallion, M (2009) Should the Randomistas Rule? The Economists' Voice 6:2 [online]. Available from: http://dx.doi.org/10.2202/1553-3832.1368 [Last accessed 25 August 2013]

Reinikka, R and Svensson, J (2011) The Power of Information in Public Services: Evidence from Education in Uganda. Journal of Public Economics, 95:7-8, 956-66.

Roy, S (n.d.) Review of Literature on Quantitative Data (matrix) [online]. Available from: http://www.mediamapresource.org/research-and-resources/ [Last accessed 25 August 2013]

Savedoff, WD, Levine, R and Birdsall, N (2006) When Will We Ever Learn? Improving Lives through Impact Evaluation. Washington, DC: Center for Global Development.

Sommerfeldt, E (2012) Content Analysis: Can Shared Indicators Improve Monitoring and Evaluation. Washington, DC: Center for International Media Assistance.

Stanig, P (2013) Regulation of Speech and Media Coverage of Corruption: An Empirical Analysis of the Mexican Press. Working Paper. Available from: http://www.hertie-school.org/fileadmin/images/Downloads/research_projects/StanigMexPress.pdf [Last accessed 25 August 2013]

Straus, S (2007) What Is the Relationship between Hate Radio and Violence? Rethinking Rwanda's "Radio Machete". Politics Society, 35:4, 609-37.

Yanagizawa-Drott, D (2010) Propaganda and Conflict: Theory and Evidence from the Rwandan Genocide. Working Paper. http://www.hks.harvard.edu/fs/dyanagi/Research/RwandaDYD.pdf [Last accessed 25 August 2013]

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