

BRIDGING THEORY AND PRACTICE
RESEARCH DISSEMINATION SERIES: WORKING PAPER
ISSUE 03 | JANUARY 2013

Factual debate and discussion programmes and their influence on political participation, political knowledge and political efficacy

Contents

Definition of terms	2
Executive Summary	4
1. Introduction	5
2. Defining the stimulus – factual debate and discussion programmes as mediated deliberation	7
3. Defining the outcomes – political participation, political knowledge and political efficacy	10
Political Participation	10
Political Efficacy	11
Political Knowledge	12
Inter-relationship between these outcomes	12
Implications for programme design and evaluation	13
4. Reviewing the evidence base	14
4.1 The relationship between media and political participation	14
Evidence for media in general	14
Evidence for dialogic formats	15
4.2 The relationship between media and political knowledge	16
Evidence for media in general	16
Evidence for dialogic formats	17
4.3 The relationship between media and political efficacy	18
Evidence for dialogic formats	18
4.4 Discussion of limitations	19
5. Evidence from BBC Media Action Dialogic Formats	21
5.1 Impact of Sajha Sawal on political participation	21
5.2 Analysis stage 1 – Exposure to the radio programme	23
5.2.1. Outcome measure – Political participation	23
5.2.2 Outcome measure – Discursive participation	24
5.3 Analysis stage 2 – Varying levels of exposure to radio programme	25
5.3.1 Outcome measure – political participation	26
5.3.2 Outcome measure – Discursive participation	27
5.4 Discussion of findings	28
5.5 Limitations of the findings	29
6. Conclusions and considerations for future programme and research design	30
Summary of the evidence base	30
Considerations for future programme development	30
Considerations for future impact research	31
References	33
Technical appendix	37

Definition of terms

The following list provides BBC Media Action's definitions of key terms in the specific context of this working paper and research project. These concepts are explained in more detail in the main text.

Covariate

A variable that is possibly predictive of the outcome under study. A covariate may be of direct interest or it may be a confounding or interacting variable.

Deliberative forum

A place or event organised for deliberation or debate.

Dialogic media formats

Television and radio programmes that present multiple and often opposing views to the audience and sometimes give them the opportunity to participate in the programme. Talk shows, discussion and debate formats can all be considered dialogic in this way.

Discursive participation

The various interactive ways in which citizens can talk in public settings about issues that affect the community, state, or nation in which they live – from one-to-one conversations to more formal meetings. However in the data from Nepal analysed in this paper, discursive participation includes only informal discussion with family, friends, neighbours and co-workers.

Explanatory variable

Sometimes also known as an independent variable, this is a variable that explains what you would like to predict in a study. The presence or degree of the explanatory variable determines the change in what is predicted.

Generalisability

The extension of research findings and conclusions from a study conducted on a sample population to the population at large. While the dependability of this extension is not absolute, it is statistically probable.

Grey literature

A library and information science term that refers to informally published written material (such as reports) that may be difficult to trace via conventional channels such as published journals and monographs because it is not published commercially or is not widely accessible. It may nonetheless be an important source of information for researchers because it tends to be original and recent.

Mediated deliberation

A form of public deliberation achieved when the media acts as a 'mediator' between the mass public and elected officials. The communication professionals of the media relay information, values, and diverse points of view to the public in order for effective public deliberation to occur.

Mediating variable

A variable used in statistics that describes 'how' rather than 'when' effects will occur by accounting for the relationship between independent and dependent variables. A mediating relationship is one in which the path relating variable A to variable C is impacted by a third variable (B). In such cases, a mediating variable plays an important role in governing the relationship between the other two variables.

Monologic media formats

Television and radio programmes that transmit information to the audience as passive recipients. Traditional news formats are often considered to be monologic.

Panel study

Research using data from a (usually small) number of observations over time on a (usually large) number of cross-sectional units such as individuals, households, firms, or governments.

Political efficacy

A theoretical concept used to explain political behaviour in political science. It indicates a citizen's faith and trust in government and his or her own belief that he or she can understand and influence political affairs. It is commonly measured by surveys and used as an indicator for the broader health of civil society.

R²

A statistic that illustrates the percentage of individual differences in political behaviour outcomes (such as discussion of politics, voting and questioning politicians), as explained by the characteristics analysed (for instance age, literacy level, etc.). An R² of 100% indicates that, collectively, the characteristics studied would explain all differences in political behaviour. On the other end of the scale, an R² of 0 would indicate that the characteristics explain none of the differences.

State-society relations

DFID defines this as 'interactions between state institutions and societal groups to negotiate how public authority is exercised and how it can be influenced by people. They are focused on issues such as defining the mutual rights and obligations of state and society, negotiating how public resources should be allocated and establishing different modes of representation and accountability' (DFID's 2010 "Building Peaceful States and Societies" Practice Paper, p. 15.)

Two-wave panel study

A statistical study in which two or more variables (usually many more) are observed among two or more subjects at two different points in time (known as waves).

Typology

A way of describing groups of respondents displaying different clusters of behaviours, attitudes or views of the world. A typology generally consists of a set of descriptive names or 'types', attached to thumbnail sketches of typical behaviour and/or attitudes for each group.

Variable

A statistical term that describes a piece of data that has two defining characteristics: it is an attribute that describes a person, place, thing, or idea, and the value of the variable can vary from one entity to another.

Executive Summary

This research briefing focuses on the role of factual debate and discussion programming, defined for the purposes of this review as ‘dialogic formats’ – on political participation, knowledge and efficacy. The paper first establishes the programmatic elements that characterise ‘dialogic’ formats, conceptualising debate and discussion programmes as forms of mediated public deliberation. It then presents a typology of political participation, which accounts for a broad spectrum of behaviours ranging from latent forms, such as interpersonal discussion and following political affairs through the media, through to more goal-oriented, manifest forms such as voting, petitioning or protest.

The paper goes on to consider the existing peer-reviewed empirical evidence base for the impact of media on political participation and other outcomes, with a focus on dialogic formats that have the potential to fulfil this mediated deliberation function. The literature shows that political participation cannot be considered in isolation to the related individual political outcomes of political knowledge and political efficacy. It also highlights the mediating role that these outcomes, and interpersonal discussion (classified as a latent form of participation in this paper) have on more formal, manifest types of participation. While there are many studies exploring the impact of news media (a monologic format), studies of dialogic formats are much less common. Where dialogic formats have been addressed, talk radio and political campaign debates are the focus of the research.

The review found that there is evidence that exposure to dialogic formats can have an impact on political participation. It is clear, however, that the relationship between exposure to programming and manifest forms of participation cannot be studied in isolation to other important outcomes such as knowledge, efficacy and most especially interpersonal discussion. Studies show that exposure to dialogic formats can increase both the effectiveness and intensity of interpersonal discussion, which in turn is found to be associated with more goal-oriented forms of participation such as intention to vote and participation in public forums. Likewise, knowledge is strongly associated with both manifest and political forms of participation, and so has the potential to play a mediating role in the relationship between exposure and increased participation. The literature highlights, however, that while a positive relationship between programme exposure and learning exists, inaccurate information presented in broadcasts can actually amount to a decrease in knowledge.

The review of the existing evidence base is followed by a more in-depth look at the relationship between exposure to one of BBC Media Action’s own factual debate programme formats and political participation. Factual debate and discussion programme formats have been implemented in a number of countries in which BBC Media Action has worked in recent years. This paper presents data from Nepal, where the political debate programme *Sajha Sawal* (Common Questions) has been broadcasting nationally on radio and television for more than five years. The analysis provides evidence that exposure to a debate programme on the radio is positively associated with levels of both latent and manifest political participation, even when controlling for demographic factors and other personal characteristics.

The paper concludes with considerations for programme design and future impact evaluation research.

I. Introduction

A crosscutting objective for all BBC Media Action governance work is to contribute to increased quality, and sometimes quantity, of engagement between people and power-holders within society. Such an objective can be approached from multiple perspectives – be it influencing power holders to engage more effectively with their citizens through encouraging transparency and accountability, or supporting media to provide channels through which public and power holders can interact. It can also involve empowering individuals themselves to play a more active role in the political process. BBC Media Action interventions are generally multi-pronged and tailored to the context of the country for which they are designed.

Where BBC Media Action work aims to support change at the individual or population level, projects and programming are primarily designed to influence political participation – that is, the extent to which individuals and groups within society are actively involved in the public sphere, political processes, debate and decision making. Participation in this sense can span the spectrum of interpersonal political discussion, to dialogue on political issues through traditional and new media, to more formal or manifest forms of participation such as petitioning, protest, contacting officials, or voting.

The type of participation that BBC Media Action projects seek to influence depends on both the overarching objective of an intervention and the context in which that intervention is implemented. For example, where the overarching objective of a project is to contribute to more accountable state-society relations, informal individual activities may be just as important as formal participation in the electoral process to vote in those leaders who will be more responsive to citizens' needs. Such informal individual actions could include raising issues with the local media or questioning leaders at town hall meetings, for instance.

Depending on the context in question, numerous media formats are thought potentially to promote individual outcomes. The importance of an objective, reliable and unbiased news media to inform and politically empower citizens is well recognised within the political communications field. Factual formats can facilitate greater access to information, and where these incorporate a discursive or interactive element, they additionally provide audience members, at home or in studio, with an opportunity to observe or engage in dialogue with experts, leaders or other guests. As such factual formats including debate and discussion programmes can provide an independent platform for public dialogue and opportunities for citizens, or their representatives, to deliberate, debate and question.

BBC Media Action has also employed drama to address issues that may otherwise be sensitive or taboo to discuss in order to challenge individual attitudes, or influence social norms over time. The BBC Media Action approach to governance recognises that change is a complex and non-linear process, and that pathways to change are often influenced by multiple drivers and barriers outside the sphere of influence of a media intervention.

The extent to which these different media formats can impact on individual and collective political participation is a question that requires much more investigation. Empirical evidence for the impact of media on such outcomes exists, however literature reviews that assess evidence on the topic

generally do not distinguish news media formats from other more discursive or interactive factual formats, or entertainment formats. Additionally much of the published research to date is limited to studies from North America and Europe, and so the generalisability of the findings to fragile states or developing contexts needs to be scrutinised. If donor and practitioner understanding of the role of media in development is to be improved, greater attention must be given to differentiating between different media formats, the mechanisms they incorporate and the outcomes they seek to address. It is also important to understand the contexts that influence the extent to which they are effective or not.

BBC Media Action has been supported by the UK Department for International Development (DFID) to work with the media in 11 countries across Africa, the Middle East and Asia. Our project will contribute to state-society accountable relations and to support the empowerment of individuals to hold their government to account. In addition to building the capacity of local media, we have designed a combination of different broadcast formats to address the specific governance priority outcomes identified in each country. These include factual discussion and debate programmes, magazine shows and drama. This multi-country programme of governance work provides an unprecedented opportunity to conduct a systematic assessment of the impact of different media formats on individual-level outcomes in a range of political and social contexts. Through such cross-cultural comparative research BBC Media Action will contribute to the evidence base for the impact of different media formats on individual outcomes, and the interplay between these outcomes and the enablers and barriers that might play a role in different contexts.

This research briefing focuses on the role of factual debate and discussion programming – defined in this paper as dialogic formats – on political participation. The paper first establishes the programmatic elements that characterise dialogic formats, conceptualising debate and discussion programmes as forms of mediated public deliberation. The existing peer-reviewed empirical evidence base for the impact of media on political participation is then reviewed, with a focus on dialogic formats that have the potential to fulfil this mediated deliberation function. This is followed by a more in-depth look at the relationship between exposure to one of BBC Media Action’s own dialogic programme formats and political participation. Dialogic formats have been implemented in a number of countries in which BBC Media Action has worked in recent years, and data from Nepal is presented here, where the political debate programme *Sajha Sawal* has been broadcasting nationally on radio and television for five years. The paper concludes with a summary of the evidence gaps that still exist, and considerations for future programme design and evaluation of the impact of dialogic formats broadcast as part of BBC Media Action’s DFID-funded programme of work.

‘When I see the regular people talk in the programme I feel motivated and it gives me confidence that I can also speak in front of the public.’

(Female Sajha Sawal listener, rural Nepal)

2. Defining the stimulus – factual debate and discussion programmes as mediated deliberation

Fraefel & Haeussler (2011) define media debates and interviews as ‘dialogic formats’ and contrast these discussions to ‘monologic formats’ such as documentaries or news programmes. Where dialogic formats present multiple and often opposing views to the audience, giving viewers or listeners access to a spectrum of opinions in one programme and in some cases an opportunity to participate, monologic formats transmit information to the audience as passive recipients. Talk shows, discussion and debate formats can all be considered dialogic in this way.

It is important to acknowledge this distinction between different formats to understand the relationship between media and individual-level political outcomes. Dialogic formats contain an element of political interactivity or mediated two-way communication (for example, talk shows, discussion programmes and political debates) while more one-way information relay formats include news media.

Bucy and Gregson (2001) describe news media as a passive-indirect format, which they theorise leads to encouragement of passive-indirect modes of participation (such as following public affairs via the media). However the purpose that interactive or mediated communication formats, such as debates, political talk radio, and televised town hall meetings can lead to *active-direct* modes of political participation – such as voting, seeking office or writing letters to public officials. Hollander (1996) posits that talk radio, another dialogic format, ‘provides verbal proximity to media and political elites, as well as access to a mass audience of fellow listeners, via the direct feedback of listener calls’. This highlights the manner in which programmes of this kind sometimes explicitly attempt to mobilise the public to participate in civic affairs or contact officials.

In the context of a fragile, developing democracy, Mwesige (2009) argues that political talk radio in Uganda can be considered arenas of political competition and civic participation. Through these citizens can ‘communicate their preferences, interests, needs, collective problems and aspirations to seek redress from those in charge of public policy or change them’, in addition to learning about public affairs and educating each other. Additionally, as Fraefel & Haeussler (2011) highlight, the rise of new technology has meant that political discussion increasingly features the voices of members of civil society. Until recent years some of these people may have been passive or played only a marginal role in much traditional media coverage of political issues.

The characteristics of these media formats echo those principles on which political theories of deliberative democracy are based. Deliberative democracy can be thought of as a discursive system where citizens voluntarily and freely participate in discussions on public issues, share information about public affairs, talk politics, form opinions and participate in political processes (Kim et al, 1999). In a democratised public sphere all members of society, especially marginalised groups, should have the opportunity to participate in shaping, influencing and criticising public opinion. According to Chambers (2001) ‘while 19th and early 20th century democracy focused on expanding the vote to

include everyone, today democratization is focused on expanding the public sphere to give everyone a say'. Such a shift from vote-centric to talk-centric democratic theory places a focus on the communicative processes of opinion and will formation that precede the more formal political engagement process – voting (Delli Carpini, 2004).

At the core of deliberative democracy is public deliberation – defined by Burkhalter, Gastil & Kelshaw (2002) as a combination of careful problem analysis and an egalitarian process in which participants have adequate speaking opportunities and engage in attentive listening or dialogue that bridges divergent ways of speaking and knowing¹. Public deliberation in the context of media is known as 'mediated deliberation' – a concept originally advanced by Benjamin Page. Page (1996, pg. 6) argues that the size of the citizenry and the multitude of complex political problems 'necessitate a division of labour in political expertise, policy-making and political communication'. However while professional policy makers and politicians engage in deliberation in small groups, there is a necessity for a level of public deliberation that involves all of the citizenry to ensure that citizens are informed and in a position to hold their leaders to account. Page argues for the need for 'professional communicators', who 'not only help policy experts communicate with each other, but also assemble, explain, debate and disseminate the best available information and ideas about public policy, in ways that are accessible to large audiences of ordinary citizens'. Page's view resonates with that of Habermas (2006) who argues that the media play an important role:

'to mobilize and pool relevant issues and required information, and to specify interpretations; to process such contributions discursively by means of proper arguments for and against; and to generate rationally motivated yes and no attitudes [i.e. public opinions] that are expected to determine the outcome of procedurally correct decisions'. (Habermas, 2006)

Gastil & Black (2008) propose a framework that considers both the analytic and social processes that should be in place for deliberation to occur across a range of different sites of public talk, and Box 1 maps the observable ways in which media can be assessed to fulfil these functions. Dialogic formats such as audience, political and campaign debates and political discussion programmes, which incorporate these media system functions, could be said to deliver the functions of a deliberative media process.

¹ Although we note that debate abounds regarding the true concept and definition of public deliberation, and the legitimacy of different types of conversation in fulfilling this function, communication theorists agree that for public deliberation to exist a number of conditions must be satisfied (Burkhalter et al, 2002; Fishkin 2011; Girard, 2011; Gastil & Black, 2008). Fishkin (2011) describes five characteristics which must be satisfied for legitimate deliberation – accurate information available to all participants; substantive balance; diversity of views; conscientious weighing of all arguments; and equal consideration of views based on evidence.

Box 1: Media Processes for Mediated Deliberation (Gastil & Black, 2008)

Analytic processes:

- a solid information base is created
- participants identify and prioritise the key values at stake in an issue
- participants identify a broad range of solutions
- they weigh the pros and cons and trade-offs of solutions
- and (if in a decision making body) make the best decision possible

Social processes:

- an adequate opportunity to speak among all *points of view*
- all participants have a right to comprehend – speakers communicate in a way that others can understand
- obligation to consider carefully the words they hear
- respect for other participants

This definition encompasses a range of debates and discussion formats that (regardless of variations in style, topics and participants) share a common set of underlying principles. Therefore it is a useful one with which to proceed towards a systematic evaluation of the impact of BBC Media Action's governance programming on individual-level political outcomes. These principles include relevance of information to audience needs, inclusivity of voice, and effective moderation to ensure balance of perspectives, comprehension and respect for all participants. Where it is relevant to the media landscape in question, BBC Media Action dialogic programme formats additionally enable socially and geographically diverse audiences to have their voices heard in the deliberation process. Much of BBC Media Action's interactive factual programming can be viewed through this mediated deliberation lens, and these formats are referred through throughout the remainder of this paper as 'dialogic'.

In Section 4 this contextualised definition of mediated deliberation is used to structure a review of the available empirical research on political mass media outputs and individual political outcomes of interest. A differentiation is made between monologic and dialogic media stimulus, in summarising the strength of the peer-reviewed evidence base. Before this evidence is presented, the political outcomes of interest and common approaches to measurement are defined in Section 3 below.

3. Defining the outcomes – political participation, political knowledge and political efficacy

Political Participation

Political participation is a multi-dimensional construct, and as a result wide-ranging definitions of it have been employed across the theoretical and empirical literature. Where in some cases there is a risk of being too confined in what is accepted as a political participation activity, in others there are problems with conceptual confusion and stretching to include more informal types of participation (Ekman & Amnå, 2009).

Verba, Scholzman & Brady (1995) propose a rather narrow definition of political participation as any ‘activity (by private citizens and ordinary people) that has the intent or effect of influencing government action – either directly by affecting the making or implementation of public policy or indirectly by influencing the selection of people who make those policies’. However in their review of typologies of political participation, Ekman & Amnå (2009) draw a useful distinction between ‘manifest’ forms of political participation, which include formal, goal-oriented behaviours such as those suggested in the definition of Verba et al, (for instance voting, protest, petitioning, strikes or contacting officials), and more ‘latent’ forms of participation. In the typology that Ekman & Amnå propose, latent forms of participation include activities classified elsewhere as ‘civic engagement’ or ‘social involvement’, such as following political issues, contacting the media on issues, donating, volunteering or working as part of a collective to solve local problems. They argue that consideration for such latent forms of participation is central to progressing understanding of new forms of political behaviour, and also captures the nuance of political engagement across different country contexts over time.

Bucy and Gregson posit that involvement in a debate or talk show is in itself a form of political participation and that ‘interactive political experiences that occur...via cable channels and over the airways are deemed every bit as “real”, useful and important as their non-mediated corollaries’ (Bucy and Gregson, 2001, p.269). Delli Carpini, Cook, & Jacobs (2004), in their review of the empirical research on public deliberation and citizen engagement, also argue that ‘public talk’, or interpersonal discussion on political issues, is a form of political engagement. Both media engagement and interpersonal discussion are included in the Ekman & Amnå typology as a form of latent² participation.

This is a useful typology to adopt in reviewing the empirical evidence for the impact of media on political participation, and a spectrum on which BBC Media Action governance programming impact evaluation research is based. Where the overarching objective of a governance focused project is to support more accountable state-society relations, consideration for both latent and manifest forms

² Ekman & Amnå (2009) caution that the civil actions they classify as ‘latent’ are of course ‘manifest’ in the sense that they are observable behaviours, but ‘latent’ in relation to specific political parliamentary and extra-parliamentary actions. This is because they include not only activities intended to influence actual political outcomes but also activities that may potentially be of relevance for future ‘manifest’ political action.

of participation is crucial. While voting could be considered the ultimate mechanism that enables citizens to sanction their leaders for failing to account for their decisions and actions, in some contexts raising issues through the media can be just as important as a means to demanding answerability or imposing reputational sanctions on those in power (Larkin & Reimpell, 2012). For each of the studies reviewed in reviewed in Section 4, the type of political participation outcome investigated has been categorised as latent or manifest in order to organise the evidence more clearly.

Political participation, in any form, cannot be considered in isolation to other individual political attitudes and outcomes. Evidence from the wider literature on political engagement suggests that political efficacy, political knowledge and interpersonal discussion on political issues (latent participation) may have a mediating effect on more manifest (or formal) political participation. Bucy and Gregson (2001) theorise that even if exposure to dialogic formats results only in psychological rewards to the individual, such as increased political efficacy and feelings of empowerment, these in turn can motivate further political participation in already active citizens. These positive changes can also motivate politically inactive citizens into initiating some form of latent, civic participation.

Political Efficacy

There is a vast literature on the concept of political efficacy, and this section demonstrates just some of the perspectives that have been presented. The most widely accepted conceptualisation of political efficacy describes it as ‘the feeling that individual political action does have, or can have, an impact upon the political process... the feeling that political and social change is possible, and that the individual citizen can play a part in bringing about this change’ (Campbell, Gurin & Miller 1954). Political efficacy can be divided into two related but distinct components – external and internal efficacy.

External efficacy constitutes the individual’s belief that that political elites and governmental institutions are responsive to citizen demands. Internal efficacy is the belief that one is competent to exert influence on and engage in the political process (Clarke, Kornberg & Scotto, 2010). McKinney & Chattopadhyay (2007) further distinguish political information efficacy (an element of internal efficacy). This may be defined as the level of confidence one has in his or her political knowledge and the belief that one possesses sufficient knowledge to engage in the political process through formal political behaviours such as voting.

A brief review of several studies measuring political efficacy undertaken for this paper revealed a degree of overlap in the way attitude statements are assigned to concepts of political efficacy, political cynicism, political trust and other democratic ‘norms’. (For example see McKinney & Chattopadhyay, 2007 and Finkel, Horowitz & Rojo-Mendoza, 2012.) These challenges have been faced in BBC Media Action’s own research, as illustrated in difficulties with identifying a reliable efficacy measure for the Nepal analysis presented in Section 5 (see the Appendix for technical background to this). The standard measure of political efficacy on BBC Media Action governance projects funded by DFID consists of a number of items that attempt to capture both internal and external efficacy. Analysis will be conducted on these items in all countries to produce a scale that is

reliable for each context, and ideally, across multiple contexts. Future research briefings in this series will document this process.

Political Knowledge

Political knowledge can be conceptualised on numerous levels. In its simplest form it is defined as knowledge of political facts (Delli Carpini & Keeter, 1993), but it is related to the concepts of political awareness, political expertise and, at the furthest end of the spectrum, political sophistication. (This is defined by Eveland and Hutchens, 2008 as '*knowledge of the political realm*').

Political knowledge is extremely difficult to measure, and in practice few studies explore political sophistication or more complex levels of political expertise. Rather, measures tend to be fact-based responses to survey questions about political representatives or systems, or self-ratings of levels of knowledge on specific political 'issues', both of which are problematic. The former have been criticised for having poor validity as a measure of a true domain of political knowledge, and the latter have been criticised on the grounds that self-perceived knowledge does not necessarily correlate with actual knowledge (Gajora, 2012). It has been found that those who can recall factual information most completely may not necessarily possess a deep understanding of political affairs (Mondak, 1995, in Gajora, 2012). However the nature of quantitative survey data collection limits the extent to which studies can take alternative approaches, and so for now most large-scale studies continue to employ simple factual or self-report style measures of political knowledge³.

Inter-relationship between these outcomes

Empirical studies generally do not focus on participation, efficacy or knowledge outcomes in isolation, but rather investigate the relationships between them, or the mediating effects of the latter two on participation. Scholars widely accept the relationship between political efficacy and political behaviour. Morell (2005, p.50) states that without internal political efficacy individuals 'will likely become apathetic about, indifferent to and disengaged from the democratic process'. Delli Carpini (2004, p.398) notes that democratic attitudes such as political efficacy 'are positively associated with the amount and quality of democratic engagement'. Verba et al (1995) identify efficacy as part of a

³ A self-report measure of political knowledge will be captured as standard on all governance projects funded by DFID. Capturing an objective measure of knowledge will only be possible where the topic lends itself to this type of measurement. In Kenya, for example, where a programme objective is to improve citizens' knowledge of revisions to the constitution, it will be easy to develop multiple choice questions capturing factual knowledge of certain constitutional articles and revisions. However where an objective is to improve knowledge on broader topics, such as policies of political parties in the case of Bangladesh, factual measures can be much more difficult to implement. In the Nepal quantitative study, presented in Section 5, a simple measure of knowledge of political leaders and parties was used (the measures are provided in the Appendix).

broader political engagement factor, among three overarching factors predicting political participation (which incorporate knowledge and recruitment networks).

Numerous studies show that increased political knowledge relates to increased voter turnout (Verba et al, 1995; Delli Carpini & Keeter, 1996; Larcinese, 2005; and Grönlund & Milner, 2006). Larcinese's (2005) analysis of 1997 British election data showed that a person scoring the maximum on a measure of knowledge is around one third more likely to vote than someone at the bottom of the knowledge distribution. The author concluded that political knowledge has a statistically significant association with British citizens' likelihood to vote. Galston (2001) found that people possessing more political knowledge were better able to understand political processes and events, more likely to support core democratic principles such as tolerance, and more likely to participate in public matters.

Research has also shown that interpersonal political discussion is associated with increased political knowledge (Eveland et al, 2005) and political efficacy (Min, 2007). Eveland and Thomson (2006) additionally claim evidence of a causal link between political discussion and political knowledge. In a US national mail panel study that employed stratified quota sampling they found a statistically significant relationship between frequency of discussion and knowledge of presidential candidates. This was true even after controlling for prior knowledge levels, demographic variables, political interest, and news media use, (The research was part of a wider study on the US presidential election in 2000 and participants willingly volunteered to take part in periodic surveys.)

Implications for programme design and evaluation

In designing media and communication interventions to influence governance outcomes at the individual and population level, it is therefore important to understand and observe politically oriented behaviour along the spectrum from interpersonal discussion to voting and protest. Depending on the social and political context of the population in question, an increase in levels of interpersonal political discussion may be just as positive and desirable an outcome as more manifest forms of participation such as voting. This is particularly relevant where democratic processes and electoral systems are weak. Likewise other attitudes, attributes and behaviours, which may play a mediating role in a pathway to change, should be explored through formative research and accounted for in evaluative research.

BBC Media Action has been funded by DFID to contribute to improving state-society accountability, in 11 developing countries across Africa, the Middle East and Asia. Empowering individuals to play a role in holding their leaders to account is a core objective across all of these projects. Depending on the population and political context in question, such empowerment could take many forms – from simply increasing awareness among citizens that they are entitled to question government on their decisions and actions, to providing channels through which individuals can directly raise issues with national leaders. Therefore impact research will explore a spectrum of participation, political efficacy, and self-report political knowledge as standard across all DFID global grant funded governance projects. Where possible and relevant, these include measures of factual political knowledge and other political attitudes.

4. Reviewing the evidence base

This section considers peer-reviewed empirical studies on the effect that media, and more specifically dialogic formats, have on political participation and related outcomes as outlined above.

Monologic media formats, such as news and press, currently dominate the literature. While we are primarily interested in evidence regarding dialogic formats, the findings from these studies are still relevant and important to understanding the potential impact of media overall and so have not been excluded from this review. However where evidence exists, a specific focus is placed on evidence from studies of formats that may potentially be defined and characterised as dialogic (see Section 2).

4.1 The relationship between media and political participation

Evidence for media in general

The relationship between mass media and political participation is complex, and a wealth of literature exists evidencing that exposure to mass media, generally defined in studies as news media, is positively associated with both manifest and latent forms of participation (Eveland and Scheufele, 2000; Kim, Wyatt and Katz, 1999; McLeod, Scheufele and Moy, 1999; de Vreese and Boomgarden, 2006; Zhang and Chia, 2007).

When goal-oriented, manifest forms of participation are considered, activities are generally combined in an index (Zhang and Chia, 2007; McLeod et al, 1999). If voting is included in these indices, they tend to measure 'intention to vote' rather than past voting behaviour. Where voting has been looked at in isolation (De Vreese and Boomgarden, 2006) it was found that news media with high levels of political content (such as broadsheet newspapers and public television news) had a greater effect on propensity to turn out to vote than media with less political content. Numerous studies have also looked at the impact of news media exposure on intention to take part in public meetings or forums.

Both newspaper readership (McLeod, Scheufele, and Moy, 1999a) and paying attention to public affairs on television (Zhang and Chia, 2007) have been found to predict intention to attend and speak at a local forum. McLeod et al (1999b) also found evidence that people who were exposed to news media were more likely to attend a public deliberative forum. Leeson (2008) examined the relationship between media freedom from government control and political knowledge, participation and voter turnout. Analysis of data from a sample of more than 80,000 people across 61 countries showed that in countries where media freedom is low (such as Zimbabwe and Egypt), voter turnout is significantly lower than in countries with the freest media (for instance Finland) – approximately 38% and 77% respectively. Other types of political participation, such as willingness to sign a petition and attending demonstrations, were measured through the World Values Survey (2005) and were also found to correlate positively with media freedom. Leeson attributes this to lower levels of political knowledge and higher political apathy in countries where media freedom is low.

Where latent forms of participation have been observed, interpersonal political discussion or *political talk* is the focus of almost all studies. In these studies interpersonal discussion varies in terms of

being viewed as an outcome of mass media exposure (Delli Carpini et al, 2004; Pan, Shen, Paek & Sun, 2006) or a mediating factor in more manifest forms of political participation (Scheufele, 2002; Kim, Wyatt, & Katz, 1999). Cho et al (2009) theorise that 'reasoning' behaviours, which include interpersonal discussion, are an integral part of a model of communication effects. The authors refer to 'reasoning' as the 'mental elaboration and collective consideration of a topic, [and] is a critical condition for news media use to produce political outcomes'. In a cross-sectional study on news exposure and political participation, Jung et al (2011) found that exposure had a significant effect on political participation through its impact on political discussion, political knowledge, and efficacy. As with previously mentioned studies, interpersonal discussion largely mediated the effects of news media on political outcomes. Jung et al (2011) do not claim causality, although they infer causal directions through use of structural equation modelling and comparison with alternate models and theories.

Observing interpersonal discussion as an outcome in its own right, Kim, Wyatt, and Katz (1999) found that issue-specific news media use was the best predictor of informal political discussion among participants. Their analysis also demonstrated that news media use and political discussion were more strongly associated with formal (manifest) than other informal (latent) types of participation. Scheufele (2002) also found that the relationship between television news exposure and political participation was stronger for those participants who discussed politics frequently with others than for those participants who did not. This study defined participation as an index that included manifest forms such as voting, protesting and attending meetings. In explaining his findings, Scheufele (2002) explains that 'interpersonal discussion plays a role in the reception and processing of political news when it comes to translating mass-mediated messages into meaningful individual action'.

Evidence for dialogic formats

The evidence presented thus far in this section is from studies of one-way media communication formats that lack dialogue and/or interactivity between citizens and political actors. The literature search uncovered limited empirical evidence for the impact of dialogic formats on political participation. Where dialogic formats have been addressed, talk radio and political campaign debates are the focus of the research in this field.

In their review of literature on political debates, McKinney & Chattopadhyay (2007) note evidence for the relationship between exposure to debate programmes and manifest forms of participation. These include greater participation in political campaigns and an increase in reported intention to vote, as well as latent behaviours such as seeking out additional campaign information. In an analysis of telephone survey data in the US, Hollander (1996) found callers to a talk radio programme to be more politically engaged than talk radio listeners and non-listeners. Their political engagement index included both manifest (writing to an elected official, donating money to political action groups or candidates, or attending town meetings) and latent forms of participation (writing to news media). Hofstetter (1998) replicated these results, finding that callers to a political talk radio programme were more politically engaged than listeners – who were more politically engaged than non-listeners.

Hollander (1996) concludes that audiences of talk radio are '*open to political mobilization*' and feel more involved in the political process.

Bridging research across talk radio and debate formats, Pan, Shen, Paek, & Sun (2006) analysed data from 1,555 panel respondents during the 2000 US presidential election to explore whether exposure to the campaign stimulated interpersonal political discussion. Further, they explored how such discussion related to manifest participation (such as contacting a public official, attending political campaign meetings and donating money to political candidates). Campaign exposure included viewing televised presidential debates and listening to radio discussion about campaigns. Comparing responses before and after the election, Pan et al (2006) found that exposure to a media election campaign affected the intensity and effectiveness of interpersonal political discussion among citizens. In line with other studies (such as Scheufele, 2002; Kim, Wyatt, & Katz, 1999), the importance of interpersonal political discussion was again highlighted, with the frequency of political discussion significantly positively associated with respondents' civic and campaign participation. The authors conclude that '*political conversation among citizens in the familiar settings of their everyday life needs to be viewed as a building block of public life in a democracy*' (Pan et al, 2006).

It should be noted that across most studies of media and political participation researchers observe the influence of media alongside respondents' other socio-demographic characteristics. Aspects of the individual context such as age, gender and ethnicity, or psychological, attitudinal and behavioural characteristics such as political disposition or interest, can potentially impact on an individual's likelihood to be influenced by a media stimulus. Those characteristics that are commonly controlled for in studies looking at political participation and related outcomes include age, gender and education, as well as other combinations of measures of poverty/wealth, social class, literacy and ethnicity (de Vreese & Boomgarden, 2006; Larcinese, 2005; Gajora, 2011; Finkel et al, 2012; Barabas & Jerit, 2009).

4.2 The relationship between media and political knowledge

Evidence for media in general

There is a wealth of empirical research that looks at the impact of media exposure on political knowledge, either as an outcome in its own right or as a mediating factor in studies of political participation. De Vreese and Boomgarden (2006) report that it is generally agreed among scholars that mass media plays an important role in the process of public learning. Increased access to political information, facilitated by mass media, has been shown to increase citizens' political knowledge as well as politicians' responsiveness to citizens' needs (Snyder & Stromberg, 2004).

A large body of evidence points to the different effects of exposure to media formats on political knowledge. With regard to monologic media formats, numerous studies have found a positive relationship between use of news media and levels of political knowledge (Chaffee, Zhao, and Leshner, 1994; Eveland and Scheufele, 2000; Neuman et al, 2002; de Vreese and Boomgarden, 2006; and Jung, Kim, and de Zuniga, 2011). In a two-wave panel study in Denmark and the Netherlands, de Vreese and Boomgarden (2006) controlled for participants' previous levels of knowledge in order

to examine the differential effect of exposure to news regarding the European Union (EU). Exposure through both public and commercial television and broadsheet and tabloid newspapers was considered. They found that media exposure significantly increased participants' political knowledge (measured as two questions on EU politics). Further analysis revealed that it was the *content*, as opposed to the *medium* (TV/radio/press), of the news that resulted in knowledge gains. When news contained politically relevant and substantial information, the effect of exposure on knowledge was significant. Barabas & Jerit (2009) found a similar outcome in their study of news media and policy-specific knowledge, where volume, breadth and prominence of news stories were associated with knowledge increase above any socio-demographic factors. This has important implications for the design of programming that aims to increase knowledge, and is discussed further in Section 6.

Evidence for dialogic formats

The evidence for the impact that dialogic formats, specifically, can improve individuals' level of political knowledge is mixed. Several studies provide evidence that debates and talk radio can result in learning, however where this entails learning incorrect information it cannot be equated with knowledge increase. Rather it constitutes a decrease in political knowledge. In a panel study to measure participants' political knowledge before and after the screening of a televised presidential debate, Maurer and Reinemann (2006) found that although exposure resulted in 'learning', participants' learned both correct and incorrect facts. Although it used a quasi-experimental design, their sample was small and self-selected, and participants had higher levels of education and interest in politics than the general audience of the debate programme.

Similar evidence is provided in the study by Hofstetter et al (1999) of political talk radio, whereby listeners learned from both accurately presented facts and incorrect assertions made by German political candidates. Additionally where self-report measures of knowledge were used, Hollander (1995) found that while exposure to talk radio generally resulted in a sense of feeling informed, the extent to which this related to actual campaign knowledge depended on listeners' level of education. Among less educated listeners this did not relate to actual campaign knowledge, while talk radio exposure was related to both the feeling of being informed and having campaign information among more highly educated people. Hollander suggests that 'greater cognitive ability and motivation brought about by education increases the ability to glean useful information from such programs'.

This effect of education on knowledge gain from programmes echoes the long-standing theory on the 'knowledge gap hypothesis', proposed by Tichenor, Donahue and Olien (1970) and supported by subsequent studies that provide evidence for the conditional nature of media effects. The knowledge gap hypothesis refers to the role of media in exacerbating disparities in knowledge that can exist between those of higher and lower socio-economic status. This has been explained by scholars as being a result of individuals with higher socio-economic status both having pre-existing knowledge (prior to exposure to a media stimulus), and also being better able to use information from media exposure compared to people with a lower socio-economic status. This creates even further advantages for people with a higher socio-economic status and thus widens the gap in knowledge between these two groups.

Where the aim of dialogic programming is to increase knowledge two issues of importance emerge from this limited review of evidence. Firstly, attention must be given to ensuring accuracy of information aired, and if participants voice distortions of the truth in dialogic programmes this must be followed up to avoid people learning incorrect facts or distortions. Secondly, presenters or discussion moderators should provide ample interpretation of complex information to support listeners who may lack prior education, experience or political knowledge to fully comprehend or process the issues and views discussed.

4.3 The relationship between media and political efficacy

Evidence for dialogic formats

There has been an influx of recent studies looking at the relationship between internet and other new media usage on political efficacy. However empirical studies looking at political efficacy and traditional media are relatively limited. The majority focus on talk radio and televised debate programmes. During the 2004 US presidential campaign, McKinney and Banwart (2006) studied the effects of viewing televised political debate programmes on young people's democratic attitudes and values. The programme (Rock the Vote on CNN) consisted of a live, moderated debate between candidates, with questions from studio audience and home viewers. Out of eight statements intended to measure democratic norms, only the efficacy statement 'People like me don't have any say about what the government does' was significantly associated with viewing the programme. Comparing pre- and post- debate viewing responses, the study also found that after being exposed to the programme viewers were less likely to agree with the internal information efficacy statement 'Sometimes politics and government seem so complicated that a person like me can't really understand what's going on'.

McKinney and Chattopadhyay (2007) explored the impact of three televised presidential debates on young people's political efficacy. The results found that although political efficacy increased somewhat between pre- and post-debate viewing, this shift was not significant⁴. The study did find a significant effect for exposure on information efficacy, however. Respondents who had been exposed to the programme were less likely to agree with the information efficacy statement 'Sometimes politics and government seem so complicated that a person like me can't really understand what's going on'. While the design of the study was a pre/post longitudinal panel, enabling the authors to infer causality, the sample consisted of 32 students who were enrolled on communications courses. The potential for bias in this sample is extremely high and so these findings cannot be considered representative of the general US youth population.

These studies are rare examples of where political efficacy and other attitudes are explored as outcomes of exposure to dialogic formats in their own right. As outlined in Section 3 the concept of political efficacy is thought to play an important role in political behaviour. Thus political

⁴ The authors report that it 'approached significance' at $p < 0.062$

communication studies generally look at such attitudes as mediating variables in a pathway towards increasing democratic engagement.

The methodological limitations of the evidence reviewed is summarised below, and the implications of the findings for the design of programme interventions and evaluative research are discussed in more detail in Section 6.

4.4 Discussion of limitations

There is a wealth of literature showing how mass media, particularly news media, impacts on individuals' political knowledge, efficacy, participation, and demonstrating the relationship that exists between these three outcomes. However there are several methodological considerations to take into account when assessing the strength of this evidence, and implications for evaluating the impact of BBC Media Action programmes.

Firstly variations in definitions of outcomes and measures used make it difficult to compare studies. Where some studies have measured formal participation as past voting behaviour (Scheufele, 2002), others have measured it as intention to vote (Kim, Wyatt and Katz, 1999; McLeod, Scheufele and Moy, 1999). Similarly, conceptual confusion exists around the term 'civic engagement' (Ekman and Amnå, 2009) and this means that the spectrum of activities measured as latent forms of participation vary widely from one study to the next.

As noted by McKinney and Chattopadhyay (2007), research into political efficacy is relatively underdeveloped in comparison to the evidence base on participation and knowledge, and studies often do not find reliable scales of external and internal efficacy (Scheufele, 2002), or use a single-item measure of efficacy (Jung et al, 2011) due to the disagreement that exists between scholars on the valid measure of political efficacy.

With regard to design, a number of studies included here were telephone based (Hollander 1996; McLeod et al, 1999a; Zhang and Chia, 2007) or online (Jung et al, 2011), which can result in a biased sample from the outset. Several other studies also appeared to use small or non-representative samples (Hollander, 2007; Jung et al, 2011; Kim et al, 1999; McLeod et al, 1999; Maurer and Reinemann, 2006; Zhang and Chia, 2007; McKinney and Banwart, 2007). In the most extreme example, the sample used for a panel study consisted of political communications students (McKinney and Chattopadhyay, 2007).

With the exception of a few studies cited here (de Vreese and Boomgaarden, 2006; Pan et al, 2006), the majority of studies on media communication and political participation are cross-sectional designs. This means that although associations between media stimuli and outcomes can be inferred, causality cannot. Researchers go some way to addressing this problem by controlling for demographic and other endogenous variables such as interest in politics and group membership. They also use more sophisticated analyses such as structural equation modelling and hierarchical regression modelling (Eveland et al, 2005; Pan et al, 2006; Scheufele, 2002) in order to improve the robustness of findings.

There still remains, however, a paucity of evidence that shows how dialogic formats may impact on individuals in terms of their political knowledge or participation. Studies of talk radio formats contain elements of dialogic formats similar to BBC Media Action programmes (for example Hollander, 1996). However we cannot be certain they contain all the elements that ensure they are truly dialogic in format, and fulfil the functions of mediated deliberation as described in Section 2. Detail on the quality and content of media outputs studied is also somewhat neglected in reporting, with the notable exception of a few studies focusing specifically on quality of information in relation to knowledge gain (Barabas & Jerit, 2009; de Vreese & Boomgarden, 2006). Other studies of political participation include little exploration of the potential for negatively impacting on attitudes and behaviour. Mwesige (2009), however, points to the potential for ineffectively moderated political discussion to excite and inflame or alternatively promote political inertia. Further consideration for the negative impact of poor quality or incendiary discussion on air is important.

The lack of evidence from developing countries is of particular importance. The vast majority of evidence that has been published in empirically reviewed journals comes from studies of media and populations in Europe and North America. Although evidence from developing countries does exist, this has mostly been conducted as part of donor funded evaluation studies of development interventions, and published as grey literature. It is important to bear in mind that findings from studies conducted in a Western context, with long-standing, developed democracies, may not be generalisable to the contexts within which BBC Media Action works.

As Leeson (2008) highlights in his examination of media freedom from government control and political knowledge and participation, in countries where the media is state controlled, citizens are often politically apathetic. This in turn means that they are neither politically knowledgeable nor active enough to monitor effectively or punish the activities of self-interested politicians. In contexts such as these, there is a very different environment and set of social and political barriers to deal with when trying to influence individual or collective outcomes through media interventions. There is a great need for further peer-reviewed studies from non-Western contexts.

While the studies reviewed in this paper provide useful evidence for the relationship between media and political participation, we cannot verify that the media stimuli in these studies are comparable to the type of programming that BBC Media Action produces in the countries in which we work. For example, we cannot say conclusively that talk radio is truly dialogic, and airs information that is accurate and relevant. Section 5 presents data from a BBC Media Action study in Nepal, where we are confident that the programme format meets editorial and production standards that ensure quality, and incorporates the characteristics of mediated deliberation outlined in Section 2.

5. Evidence from BBC Media Action Dialogic Formats

This section outlines the evidence for the relationship between exposure to a BBC Media Action radio debate programme, and Nepali citizens' political participation.

BBC Media Action's *Sajha Sawal* (Common Questions) is a 45-minute programme for both radio and television that has been broadcast in Nepal since late 2007. The programme provides a platform for citizens to question political leaders and decision makers about issues of importance to them, and to hold these leaders and decision makers to account. Each week, different political leaders and government officials appear before a live audience to answer questions from the public. The programme was designed to foster political awareness and dialogue among Nepali citizens and to encourage them to engage in politics. More than 16,000 people have joined *Sajha Sawal's* live studio audience on TV, and the radio version of *Sajha Sawal* is broadcast in 73 of Nepal's 75 districts on 163 radio stations.

An end-line impact evaluation of the programme was carried out in April 2012 using a mixed-method approach. This research included qualitative⁵ and quantitative research. The design of the quantitative study was cross-sectional. Data was collected through face-to-face interviews using a semi-structured questionnaire. The target audience of the end-line evaluation was men and women between 15 and 65 years of age residing in Nepal. A total of 4,000 adults (2,000 men and 2,000 women) from 23 sampled districts were included in the study, using a three-stage stratified sampling design (district, cluster, household). Since specific exposure questions were asked for both TV and radio, in order to ensure fair comparison respondents who were exposed only via TV were removed from the sample.

The findings from this quantitative research are presented here.

5.1 Impact of *Sajha Sawal* on political participation

Multiple regression analysis was conducted on data from the end-line impact study, which was carried out in April 2012. Multiple regression is a statistical technique that predicts values of a variable on the basis of two or more other variables. The results of this regression analysis tell us if there is a significant association between two or more variables, when accounting for the influence of other important characteristics that could be masking the relationship. The output shows us the ratio of increase in our outcome variable (participation) for every unit increase in our predictor variables (which include exposure to the programme).

The first stage of analysis examined the relationship between exposure to the programme and various potential explanatory variables. The second stage of analysis then explored the relationship between these same potential explanatory variables and varying levels of radio programme exposure, looking at exposed participants only. This was measured using an index that accounts for when participants last listened to the programme, the frequency with which they listen to the programme,

⁵ The qualitative research involved focus groups and interviews as follows with listeners or viewers and non-listeners or non-viewers of *Sajha Sawal*, key informants of the society, listeners of the local discussion programmes, media practitioners of partner radio stations who worked on local discussion programmes, and managers of partner radio stations.

and how much of the programme they listen to (for example part of or the entire programme). The main variables that were included in the analysis are detailed below.

- Additional exposure to *Sajha Sawal* on TV
- Political knowledge – objective measures of awareness of key political figures and parties
- Political participation⁶ – index score on a series of activities including attending rallies, contacting an official, etc.
- Discursive participation – index score on a series of interpersonal discussion items including discussion with friends and family
- Level of political interest – self-reported measure
- Freedom to act – self-reported measure
- Demographic variables – sex, age, place, literacy, and level of material deprivation

Unfortunately the analysis during the data preparation stage revealed that the political efficacy items used in this survey did not result in a reliable efficacy scale or set of subscales; therefore political efficacy was not included in regression models presented here⁷.

A three-layer regression model was developed for each analysis stage. As illustrated by the empirical evidence cited in this paper, political participation can be influenced by a number of characteristics as well as media effects. Additionally, these characteristics (covariate variables) are associated with how likely a participant is to watch a programme; we therefore control for participants' political interest, political knowledge, and freedom to act in the analysis. Discursive participation is also controlled for in this analysis of political participation, and similarly political participation is controlled for in the analysis of discursive participation. By controlling for these characteristics, we can have increased confidence that exposure is influencing our outcomes of interest. The main predictive variables entered into the regression model were:

- Model 1: exposure to the programme on radio, followed by exposure to the programme on TV
- Model 2: the other associated characteristics, or covariate variables⁸ outlined above, were next entered into the model
- Model 3: the demographic variables were entered last

The figures presented in the tables in Section 5 reflect the amount of change in the outcome measure (political participation or discursive participation), for every unit change in the characteristics entered into the model (be it exposure, demographic or other). These are beta coefficients. As each of the characteristics are measured on different scales, these beta coefficients are converted into the same units, to ensure that we are comparing like with like. These are called standardised beta coefficients and are used throughout Tables 5.1 to 5.4⁹. Only significant beta coefficients are reported on (therefore neither place nor material deprivation are included in the tables of results, as these were not found to have a significant effect on the outcome measures).

The tables also present an R² value for each model. This value reflects the percentage of difference between respondents' scores⁶ on the outcome measure (political participation or discursive

⁶ These are manifest forms of political participation, according to the typology presented in Section 3.

⁷ Refer to the appendix for further detail.

⁸ Refer to the appendix for further detail about the covariate variables.

⁹ Refer to the appendix for further detail about standardised beta coefficients.

participation) that is accounted for by the characteristics entered into the model for analysis (exposure, demographics, etc.). It is a reflection of how good a ‘fit’ this model is – the higher the R² value, the better the fit.

The implications of the findings from the tables are explained more fully in section 5.4.

5.2 Analysis stage I – Exposure to the radio programme

5.2.1. Outcome measure – Political participation

Hypothesis 1: Exposure to *Sajha Sawal* on the radio will be associated with an increase in political participation

The first stage of analysis explored the relationship between radio exposure and political participation. It was hypothesised that being exposed to the programme would be associated with an increase in political participation. Table 5.1 shows the standardised beta coefficients for each level of the model, as described in section 5.1 above.

Table 5.1 Exposure to *Sajha Sawal* and political participation

Variables	Model 1 β	Model 2 β	Model 3 β
Exposure			
Exposure to SS on Radio	.357***	.143***	.132***
Exposure to SS on TV	.051*	.000	.001
Covariates			
Interest in politics	-	.129***	.125***
Freedom to act	-	.197***	.184***
High political knowledge	-	.115***	.084***
Medium political knowledge	-	.047**	.035*
Discursive participation	-	.302***	.288***
Demographics			
Sex	-	-	-.043**
Literacy	-	-	-.083***
Total R² (%)	15.4%	41.3%	42.0%

For all blocks β represents standardised regression coefficients

*** $p < .0001$ ** $p < .01$ * $p < .05$

Outcome 1: The association between exposure to *Sajha Sawal* on the radio and increase in political participation is statistically significant

Model 1 looks at exposure on its own, and the findings show that radio exposure is significantly associated with an increase in political participation. Being additionally exposed to the programme on television also has a small, but significant, association with the outcome. When the covariate variables are added to the model however (model 2), the effect size of radio exposure decreases. Similarly, when demographic variables are added to the model (model 3) the effect size of radio exposure decreases even further.

The R² value shows that adding these additional variables increases the fit of the model. When only exposure to the programme is included in the model, only 15.4% of the variance in participation was explained. However where the final model includes all of the significant explanatory variables, 42.0% of the variance in political participation is explained by the differences in these variables.

When all other variables are held constant, interest in politics, freedom to act, high and medium political knowledge, and discursive participation each individually have a significant association with the outcome: as each of these increases, political participation increases. In terms of demographics, being female is associated with a decrease in political participation. Similarly, being illiterate is associated with a decrease in political participation. The effect of joint exposure through both radio and TV is no longer significant when we add in and control for the effect of the covariate and demographic variables.

The final model shows that when the effect of all these variables is controlled for, exposure to *Sajha Sawal* is still significantly associated with an increase in political participation, although the effect is reduced. Model 3 is the model with the best fit.

5.2.2 Outcome measure – Discursive participation

Hypothesis 2: Exposure to *Sajha Sawal* on the radio will be associated with an increase in discursive participation

The relationship between radio exposure and discursive participation was examined next. It was hypothesised that being exposed to the programme would be associated with an increase in discursive participation. Table 5.2 shows the standardised beta coefficients for each level of the model.

Table 5.2 Exposure to *Sajha Sawal* and discursive participation

Variables	Model 1 β	Model 2 β	Model 3 β
Exposure			
Exposure to SS on Radio	.347***	.092***	.065***
Exposure to SS on TV	.081**	.029	.029
Covariates			
Interest in politics	-	.443***	.441***
Freedom to act	-	.061***	.051***
High political knowledge	-	.077***	.049**
Medium political knowledge	-	.014	.004
Political participation	-	.243***	.219***
Demographics			
Sex	-	-	-.169***
Age	-	-	.054***
Total R² (%)	16.4%	52.9%	55.9%

For all blocks β represents standardised regression coefficients

*** $p < .0001$ ** $p < .01$ * $p < .05$

Outcome 2: The association between exposure to *Sajha Sawal* on the radio and increase in discursive participation is statistically significant

Model 1 shows that exposure to the programme is significantly associated with an increase in discursive participation. When the covariate variables are added to the model, however (model 2), the size of effect of exposure to the programme decreases. When demographic variables are also added to the model (model 3) the size of the effect of exposure to the programme decreases even further. Again, the effect of joint exposure through both radio and TV is no longer significant when we add in and control for the effect of the covariate and demographic variables.

The R² value shows that the addition of associated characteristics such as freedom to act and interest in politics, as well as demographic variables increases the fit of the model. When only exposure to the programme was included in the model, only 16.4% of the variance in discursive participation is explained. However where the final model includes all of the significant explanatory variables, 55.9% of the variance in discursive participation is being explained by the differences in these variables – a very good model fit.

When all other variables are held constant, interest in politics, freedom to act, high political knowledge and political participation each, individually, has a significant association with the outcome: as each of these increases, so does the level of discursive participation. Interestingly, unlike with political participation, only a high level of knowledge – and not medium – is associated with increased discursive participation. In terms of demographics, being female is associated with a decrease in levels of discursive participation. An increase in age is associated with an increase in discursive participation.

The final model shows that when the effect of all these variables is controlled for, exposure is still significantly associated with an increase in discursive participation, although the effect is reduced. Model 3 is the model with the best fit.

5.3 Analysis stage 2 – Varying levels of exposure to radio programme

The second stage of analysis explored whether there is a dose-responsive relationship between programme exposure and participation. This allows a conclusion as to whether a higher level of listenership (defined as more frequent, more recent, and more attentive listening) leads to higher levels of participation, when accounting for the characteristics that may modify the relationship between the two.

5.3.1 Outcome measure – political participation

Hypothesis 3: An increase in exposure to *Sajha Sawal* on the radio will be associated with an increase in political participation

Table 5.3 shows the standardised beta coefficients for each level of the model.

Table 5.3 Varying levels of programme exposure¹⁰ and political participation

Variables	Model 1 β	Model 2 β	Model 3 β
Exposure			
Exposure to SS on Radio	-.276***	-.126 ***	-.111**
Exposure to SS on TV	.076*	.002	-.003
Covariates			
Interest in politics	-	.144***	.147***
Freedom to act	-	.121***	.111**
High political knowledge	-	.090*	.059
Medium political knowledge	-	.079*	.069
Discursive participation	-	.311***	.293***
Demographics			
Sex	-	-	-.093**
Literacy	-	-	-.114***
Total R² change (%)	8.0%	26.7%	28.4%

For all blocks β represents standardised regression coefficients

*** $p < .0001$ ** $p < .01$ * $p < .05$

Outcome 3: The association between increase in exposure to *Sajha Sawal* on the radio and increase in political participation is statistically significant

At this level of analysis the same pattern of findings as in the exposed versus unexposed analysis is found. The addition of the covariate and demographic variables to the model results in a decrease in the effect size of exposure level on political participation. A notable difference, however, is that neither medium nor high political knowledge has a significant association with political participation, once accounting for participants' sex and literacy. The R² value again increases at each level of the model, meaning that more of the variance in political participation is explained by differences in these variables.

Looking at the individual significant demographic variables, being male is associated with higher levels of political participation than among females, and being literate is associated with higher levels of participation than among those who are illiterate.

Even at this more sensitive level of analysis however, and controlling for all of these variables, it can be seen that an increase in the level of programme exposure is significantly associated with an increase in political participation.

¹⁰ 4=low exposure and 1=high exposure; therefore a negative beta coefficient for the exposure variables indicates an increase in the outcome measure.

5.3.2 Outcome measure – Discursive participation

Hypothesis 4: An increase in exposure to *Sajha Sawal* on the radio will be associated with an increase in discursive participation

Finally, the relationship between levels of radio exposure and discursive participation was examined. It was hypothesised that increase in exposure to the programme would be associated with an increase in discursive participation. Table 5.4 shows the standardised beta coefficients for each level of the model.

Table 5.4 Varying levels exposure to *Sajha Sawal* and discursive participation

Variables	Model 1 β	Model 2 β	Model 3 β
Exposure			
Exposure to SS on Radio	-.314***	-.176***	-.135**
Exposure to SS on TV	.116**	.047	.047
Covariates			
Interest in politics	-	.327***	.322***
High political knowledge	-	.087*	.063
Medium political knowledge	-	-.014	-.019
Formal participation	-	.267***	.244***
Demographics			
Sex	-	-	-.139***
Age	-	-	.079**
Total R² change (%)	11.0%	35.4%	38.0%

For all blocks β represents standardised regression coefficients

*** $p < .0001$ ** $p < .01$ * $p < .05$

Outcome 4: The association between increase in exposure to *Sajha Sawal* on the radio and increase in discursive participation is statistically significant

At each level of the model, the effect size of increasing levels of exposure decreases, because of the addition of the covariate and demographic variables to the model. Again, at this level of analysis neither political knowledge (medium or high) nor freedom to act has a significant association with discursive participation, once accounting for participants' sex and age. The R² value increases at each level of the model, meaning that more of the variance in discursive participation is explained by differences in these variables.

Looking at the individual significant demographic variables, again it can be seen that male participants who are exposed to the programme have higher levels of discursive participation than the females, and an increase in age is associated with an increase in discursive participation.

Even at this more sensitive level of analysis, when all other variables are accounted for, an increase in the level of programme exposure is significantly associated with an increase in discursive

participation. Although the effect of exposure decreases as other characteristics are added to the model, Model 3 is the model with the best fit.

5.4 Discussion of findings

The findings from each of the regression models show that **the association between being exposed to *Sajha Sawal* on radio and participants' levels of political participation is statistically significant**. People listening to the programme are more likely to partake in manifest forms of political participation – such as attending a political rally or signing a petition – and discuss politics with others, than people who are not exposed to the programme. Building a three-stage regression model allowed us to investigate the effect of various associated individual characteristics and demographic variables on participation, and also therefore their relationship with programme exposure. The pattern of results is similar for both political and discursive participation, at both levels of analysis.

Political discussion with others was the strongest predictor of political participation, and political participation had a statistically significant association with discursive participation. This is an important result that corroborates findings in the literature, and has implications for BBC Media Action programmes. In some cases we may not be able to impact directly on audience's intention to engage in manifest types of participation, which may be affected by social or personal characteristics such as literacy. However simply encouraging dialogue and political discussion among citizens may in turn lead to an increase in more manifest types of participation.

An interesting finding is also that **participants' level of political knowledge did not always have a significant effect on participation**, once we accounted for demographic variables. For example, looking at varying levels of radio exposure, once we accounted for participants' sex and literacy level, the effect of political knowledge was no longer significant. This is because participants' sex and literacy level explain whether or not they have high or medium, as opposed to low, political knowledge – therefore once we hold these variables constant, the effect of political knowledge on participation disappears.

The analysis tells us that each of the associated characteristics (covariates) individually has an effect on participation that is statistically significant. Including these in the model increases the fit of that model. These findings show that the covariate variables such as freedom to act and political interest are not only associated with the outcome of political and discursive participation, but also with being exposed to the programme itself. That is, whether someone listens to the programme is partly explained by their interest in politics, level of political knowledge, freedom to act, and amount of political discussion with others. Interest in politics was found to be the strongest predictor of political discussion with others, and had a strong significant association with political participation.

Literacy was found to have a significant association only with political participation, and not discursive participation. This is unsurprising given the nature of some of the activities which contributed to the political participation index measure (for example signing a petition). Similarly, participants' age is only significantly associated with discursive participation – an increase in age is

associated with increased discussion of politics with others, but not with political participation. Gender was also a significant variable in each model, whereby females were associated with a decrease in political discussion, and with political participation. That the effect size of radio exposure reduces when demographics are included in the model can be partly explained by the association between sex, age, and literacy level and participation, but also through the possibility that these personal characteristics are associated with propensity to listen to a political discussion programme in the first place. It is therefore important to control for demographics, and consider this in sample size calculations, in future studies of this kind.

Being a combined viewer and listener to the programme on both radio and TV does not appear to have a greater impact on participation levels than being exposed to the programme through one platform alone. It is likely that participants who score highly on interest in politics, political knowledge, and political discussion with others are those most likely to both watch and listen to the programme; therefore when we account for these variables the effect of TV exposure alone is eliminated.

Despite the important influence that demographic factors and other personal characteristics have on participation, our findings have important implications for evidencing the effectiveness of *Sajha Sawal* and other BBC Media Action dialogic programme formats. Irrespective of participants' interest in politics, freedom to act, political knowledge, sex, literacy, and age (all of which individually contribute to the explanatory power of the models of political and discursive participation) we can conclude that when we control for these characteristics, radio exposure is still significantly associated with an increase in political participation. Indeed, there appears to be a dose-responsive relationship between exposure and participation, with higher exposure levels having a significant association with increases in both types of participation. This allows us to be more confident in our conclusion that exposure has an effect on latent and manifest forms of political participation.

5.5 Limitations of the findings

The cross-sectional study design means that although the analyses permit statements of association between exposure and political participation, a causal relationship cannot be inferred. To produce causal evidence in the future, which BBC Media Action could use to conclude with certainty that exposure to debate programmes **causes** participants to engage in higher levels of political and discursive participation, experimental or quasi-experimental designs would be necessary. The findings presented here, however, go some way to adding to the body of evidence of the impact dialogic programme formats have on interpersonal political discussion and more manifest types of participation in a developing country context. Indeed we can have increased confidence in the findings as we demonstrated that increasing levels of radio exposure are associated with higher levels of participation; not only simply whether participants were exposed to the programme or not.

The inclusion of multiple measures of efficacy – internal, external, and information – and political knowledge in future surveys, will also allow for exploration of these as outcomes, as well as their effect as covariate variables as reported here.

6. Conclusions and considerations for future programme and research design

The objective of this paper was to assess the evidence base for the role of factual debate and discussion programming – or dialogic formats – in individual political outcomes, in order to improve understanding of how these formats can best be employed to influence political participation.

Summary of the evidence base

The literature has shown that political knowledge and political efficacy are strongly associated with both latent and manifest forms of political participation. While there is a large volume of studies exploring the impact of news media (a monologic format), studies of dialogic formats are much less common. The studies that do exist, however, provide some evidence for the relationship between exposure to dialogic formats and political participation. Exposure to dialogic formats can also increase both the effectiveness and intensity of interpersonal discussion, which in turn is found to be associated with more goal-oriented, manifest forms of participation such as intention to vote and participation in public forums. Knowledge was also found to be strongly associated with both manifest and political forms of participation, and so has the potential to play a mediating role in the relationship between exposure and increased participation. Analysis of BBC Media Action quantitative data from an impact study conducted in Nepal concludes that being exposed to debate programming on the radio is associated with participants' levels of both formal and discursive political participation. Indeed, there appears to be a dose-responsive relationship between exposure and participation, with higher exposure levels having a significant association with increases in both types of participation.

The findings from the review of research, and analysis of BBC Media Action's Nepal data, indicate some important considerations for programme development and design of impact research.

Considerations for future programme development

Where media interventions seek to influence participation, a number of considerations should be made when setting objectives. The first of these is to identify the scope of that participation and the extent to which more latent forms can be targeted as legitimate aims. Depending on the country context, impacting on propensity to participate in informal ways, such as contacting media or engaging in local level discussion, may be just as important as mobilising citizens to more effectively engage with more formal democratic processes in others. The second consideration is for the pathway to change that should be contemplated. The literature shows a strong association between latent forms of participation (such as interpersonal discussion), political efficacy, political knowledge, and more manifest combinations of participation such as voting, contacting officials and protesting. Where programmes aim to encourage citizens to hold leaders to account through monitoring and questioning, the pathway to change could be strengthened through simultaneously addressing potential mediating or antecedent political behaviours and attitudes, such as interpersonal discussion or political efficacy.

Where the aim of dialogic programming is to increase knowledge, attention must be given to ensuring accuracy of information aired, and interpretation for those listeners who may lack prior education, experience or political knowledge to comprehend fully or process the issues and views discussed. Learning from studies of news media also, it is clear that level of political content, or volume, breadth and prominence of the information, is directly associated with knowledge increase. Where projects work with local partner media to improve capacity to provide a platform for dialogue and debate, attention to ensuring the quality of the discussion that people are exposed to is crucial. In one of a few studies addressing dialogic formats in a developing country context – talk radio in Uganda in this case – Mwesige (2009) cautions against the potential for poor quality or unadulterated debate to result in misinformation, distortion, inflammation of conflict, or inertia.

Considerations for future impact research

Some limitations of the current body of empirical research on dialogic formats in evidencing the role of factual debate and discussion formats in political participation have already been outlined. These shortcomings – such as lack of studies from developing countries, poor attention to the quality of the media, and reliance on cross-sectional designs – limit the extent to which a clear understanding can be established for the strength of these formats as a tool in governance development work.

Studies in Europe and North America certainly have value in understanding the potential impact of media on political outcomes. However the social and political circumstances faced by populations in many developing countries mean that some assumptions on which Western studies are based, for example that a legitimate and functioning electoral process exists, may not necessarily hold. In the absence of such structures, the way in which media can influence political participation, and even the definition of political participation itself, may need to be questioned. Many studies additionally fail to account for the quality of the media stimulus that they observe. In the case of dialogic formats, where the audience is presented with multiple viewpoints, the effective moderation of those views and check on accuracy of information aired is crucial.

Through conducting standardised qualitative and quantitative research across numerous countries funded under the DFID multi-country programme of governance work, BBC Media Action contributes to addressing some of the limitations of the current evidence base. The unique opportunity to conduct governance and media research in the context of more than 11 developing democracies and countries in Africa, Asia and the Middle East will allow for cross-cultural comparisons on individual outcomes of interest. Using a mixed method approach and nationally representative samples where possible in quantitative studies, the research will allow for rigorous analyses to explore the relationship between different forms of political participation. Analysis will also bring about understanding of how they interact with efficacy, and knowledge, socio-demographic factors, and the social, economic and political enablers and barriers that play a role in different countries and contexts. The added strength of this research will be that the quality of the media stimulus being investigated will be confirmed in all cases, and supported in many studies by objective analysis of content. While these large scale cross-sectional, or qualitative studies, will not address the shortage of causal evidence, investigation is currently underway into potential approaches experimental and quasi-experimental study designs that can produce much needed evidence at this level.

This paper is one of the first in a series that will aim to document the influence of a range of different BBC Media Action programme formats on individual outcomes of importance in the health, governance and humanitarian development fields. Subsequent papers on the topic of individual governance outcomes will build on the evidence presented here, and seek to enhance understanding of the role that media can play in promoting participation, accountability and transparency in countries where it this is most needed.

References

- Barabas, J. & Jerit, J. (2009) Estimating the Causal Effects of Media Coverage on Policy-Specific Knowledge. *American Journal of Political Science*, 53:1, 73–89.
- Bucy, E. P. and Gregson, K. S. (2001) Media Participation: A Legitimizing Mechanism of Mass Democracy. *New Media & Society*, 3, 357–380.
- Burkhalter, S., Gastil, J. & Kelshaw, T. (2002) A conceptual definition and theoretical model of public deliberation in small face-to-face groups. *Communication Theory*, 12:4, 399–422.
- Campbell, A., Gurin, G. & Miller, W. E. (1954) The Voter Decides. *Annals of the American Academy of Political and Social Science*, 296, 171–172.
- Chambers, S. (2001) Culture as publicity. In Chambers, S. & Costain, A. (Eds.) *Democracy, Deliberation and Media* (pp. 193–208). Maryland, US: Rowan & Littlefield Publishers Inc.
- Chaffee, S. H., Zhao, X., & Leshner, G. (1994) Political Knowledge and the Campaign Media of 1992. *Communication Research*, 21, 305–324.
- Cho, J., Shah, D. V., McLeod, J. M., McLeod, D. M., Scholl, R. M. & Gotlieb, M. R. (2009) Campaigns, Reflection, and Deliberation: Advancing an O-S-R-O-R Model of Communication Effects. *Communication Theory*, 19:1, 66–88.
- Clarke, H. D., Kornberg, A. & Scotto, T. J. (2010) Accentuating the negative? A political efficacy question-wording experiment. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 6:3, 107–117.
- Delli Carpini, M. X. (2004) Mediating democratic engagement: The impact of communication on citizens' involvement in political and civic life. In: L. L. Kaid (Ed.). *Handbook of Political Communication Research*. Mahwah, NJ: Lawrence Erlbaum Associates, 395–434.
- Delli Carpini, M. X. and Keeter, S. (1993) Measuring Political Knowledge: Putting First Things First. *American Journal of Political Science*, 37:4, 1179–1206.
- Delli Carpini, M. X. and Keeter, S. (1996) *What Americans know about politics and why it matters*. New Haven, CT: Yale University Press.
- Delli Carpini, M. X., Cook, F. L., and Jacobs, L. R. (2004) Public Deliberations, Discursive Participation and Citizen Engagement: A Review of the Empirical Literature, *Annual Review of Political Science*, 7, 315–44.
- Ekman, J. and Amnå, E. (2009) Political Participation and Civic Engagement: Towards a New Typology, *Youth and Society (Working paper)*, 2.

- Eveland, W. P. Jr., Hayes, A. F., Shah, D. V., & Kwak, N. (2005) Understanding the relationship between communication and political knowledge: A model comparison approach using panel data. *Political Communication*, 59, 205–224.
- Eveland, W. P. Jr. & Hutchens, M. (2008) Political Knowledge. In: Donsbach, W. (Ed.). *The International Encyclopedia of Communication*. London: Blackwell Publishing.
- Eveland, W. P. Jr. and Scheufele, D. A. (2000) Connecting news media use with gaps in knowledge and participation. *Political Communication*, 17, 215–237.
- Eveland, W.P. & Thomson, T. (2006) Is it talking, thinking or both? A lagged dependent variable model of discussion effects on political knowledge. *Journal of Communication*, 56, 523–542.
- Finkel, S., Horowitz, J. & Rojo-Mendoza, R. T. (2012) Civic Education and Democratic Backsliding in the Wake of Kenya's Post-2007 Election Violence. *The Journal of Politics*, 74:1, 52–65.
- Fishkin, J. (2011) *When the People Speak*. Oxford: Oxford University Press.
- Fraefel, M. & Haeussler, T. (2009) Deliberation and opinion formation in dialogic formats. Working Paper from ECREA Political Communication Section, the Centre for Digital Citizenship and the Jean Monnet European Centre of Excellence.
- Gajora, L. (2012) *Online Behaviour and Political Knowledge – Effects of internet use on actual and self-perceived political knowledge, issue certainty and political participation*. LAP Lambert Academic Publishing AG & Co. KG.
- Galston (2011) Political Knowledge, Political Engagement and Civic Education. *Annual Review of Political Science*, 4, 217–234.
- Gastil, J. & Black, L.W. (2008) Public Deliberation as the Organizing Principle of Political Communication Research. *Communication Research Journal of Public Deliberation*, 4:1, Article 3.
- Girard, C. (2011) La délibération médiatisée. Démocratie et communication de masse. *Archives De Philosophie du Droit*, 54, 249–266.
- Grönlund, K. & Milner, H. (2006) The Determinants of Political Knowledge in Comparative Perspective. *Scandinavian Political Studies*, 29:4, 386–406.
- Habermas, J. (2006) Political Communication in Media Society: Does Democracy Still Enjoy an Epistemic Dimension? The Impact of Normative Theory on Empirical Research. *Communication Theory*, 16:4, 411–26.
- Hofstetter, C. R. (1998) Political Talk Radio, Situational Involvement, and Political Mobilization. *Social Science Quarterly*, 79:2, 273–286.
- Hollander, B. A. (1995) The new news and the 1992 presidential campaign: Perceived versus actual campaign knowledge. *Journalism and Mass Communication Quarterly*, 72, 786–798.

- Hollander, B. A. (1996) Talk Radio: Predictors of Use and Effects on Attitudes about Government. *J&MC Quarterly*, 73:1, 102–113.
- Jung, K., Kim, Y., and de Zuniga, H. G. (2011) The Mediating Role of Knowledge and Efficacy in the Effects of Communication on Political Participation. *Mass Communication and Society*, 14:4, 407–430.
- Kim, J., Wyatt, R. O. and Katz, E. (1999) News, Talk, Opinion, Participation: The Part Played by Conversation in Deliberative Democracy. *Political Communication*, 16, 361–385.
- Larcinese, V. (2005) Does political knowledge increase turnout? Evidence from the 1997 British General Election. London School of Economics. Available from: http://eprints.lse.ac.uk/3614/1/Does_political_knowledge_increase_turnout.pdf [Accessed 18 August 2012]
- Larkin, C. & Reimpell, P. (2012) Conceptualising accountability: An approach to measurement. *Bridging Theory and Practice: Research Dissemination Series*. BBC Media Action. Working Paper Issue 2.
- Leeson, P. (2008) Media Freedom, Political Knowledge, and Participation. *Journal of Economic Perspectives*, 22:2, 155–169.
- McKinney, M. S. and Banwart, M. C. (2005) Rocking the Youth Vote Through Debate: examining the effects of a citizen versus journalist controlled debate on civic engagement. *Journalism Studies*, 6:2, 153–163.
- McKinney, M. S. and Chattopadhyay, S. (2007) Political Engagement through Debates: Young Citizens' Reactions to the 2004 Presidential Debates. *American Behavioural Scientist*, 50:9, 1169–1182.
- McLeod, J. M., Scheufele, D. A., & Moy, P. (1999a) Community, communication and participation: The role of mass-media and interpersonal discussion in local political participation. *Political Communication*, 16, 315–336.
- McLeod, J. M., Scheufele, D. A., Moy, P., Horowitz, R, Holbert, L., Zhang, W., Zubric, S. & Zubric, J. (1999b) Understanding Deliberation. *Communication Research*, 26, 743–774.
- Maurer, M. & Reinemann, C. (2006) Learning Versus Knowing: Effect of Misinformation in Televised Debates. *Communication Research*, 33:6, 489–506.
- Min, S. (2007). Online vs. face-to-face deliberation: Effects on civic engagement. *Journal of Computer-Mediated Communication*, 12:4, article 11.
- Morrell, M. E. (2003) Survey and Experimental Evidence for a Reliable and Valid Measure of Internal Political Efficacy. *The Public Opinion Quarterly*, 67:4, 589–602.
- Mwesige, P. G. (2009) The democratic functions and dysfunctions of political talk radio: the case of Uganda. *Journal of African Media Studies*, 1:2, 221–245.

Page, B. I. (1996) *Who deliberates? Mass media in modern democracy*. Chicago: University of Chicago Press.

Pan, Z., Shen, L., Paek, H. and Sun, Y. (2006) Mobilizing Political Talk in a Presidential Campaign: An Examination of Campaign Effects in a Deliberative Framework. *Communication Research*, 33, 315–345.

Scheufele, D. A. (2002) Examining differential gains from mass media and their implications for participatory behaviour. *Communication Research*, 29, 29–65.

Snyder, J. M. Jr., and Stromberg, D. (2004) Media markets' impact on politics. London School of Economics. Available on: <ftp://ftp.igier.uni-bocconi.it/varie/seminars/111104.pdf> [Accessed 18 August 2012]

Tichenor, P. J., Donohue, P. J. & Olien, C. A. (1970) Mass media flow and differential growth in knowledge. *Public Opinion Quarterly*, 34, 159–170.

Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.

De Vreese, C. H. and Boomgaarden, H. (2006) News, Political Knowledge and Participation: The Differential Effects of News Media Exposure on Political Knowledge and Participation. *Acta Politica*, 41:4, 317–341.

Zhang, W. and Chia, S. C. (2007) The effects of mass media use and social capital on civic and political participation. *Communication Studies*, 57:3, 277–297.

Technical appendix

I. Scoring

I.1 Dependent variables

Formal political participation was the additive measure of six survey items¹¹. Principal Axis Factoring (PAF) revealed that 6 of these measures load highly onto one factor (Cronbach's alpha = .818). This single factor was used as a continuous measure of political participation ranging from 6 (low participation) to 18 (high participation). Discursive participation was also measured by an index of four survey items¹² which loaded highly onto one factor (Cronbach's alpha = .891). This single factor was therefore used as a measure of discursive participation on a continuous scale ranging from 4 (low discussion with others) to 18 (high discussion with others). Although measures of political efficacy were included in the survey, PFA revealed that two items measuring internal efficacy that load onto a single factor did not provide a reliable scale (Cronbach's alpha = .288). Political efficacy was therefore not measured as a construct in this analysis.

I.2 Covariate variables

Political knowledge was measured in the survey using two objective knowledge statements¹³ which were combined to create a 3-point scale of low, medium, and high political knowledge (Cronbach's alpha = .904). Several other statements from the survey were identified as covariate variables in the analyses: These were defined as 'Freedom to act'¹⁴, and 'Interest in politics'. Freedom to act was the additive measure of two survey items to form a continuous scale from 1 (low freedom to act) to 4 (high freedom to act) (Cronbach's alpha = .699). Interest in politics, originally measured on a Likert-scale, was measured as a dichotomous variable.

I.3 Exposure variable

Model Set 2 investigated the relationship between varying levels of radio programme and exposure and the explanatory variable. A measure of exposure was derived using both recency and frequency of exposure survey items¹⁵ as well as attentiveness to the programme¹⁶.

2. Regression analysis

¹¹ Signed a petition; taken part in a peaceful demonstration; attended a political meeting or rally; contacted, or attempted to contact, a local leader, or politician to express your views; contacted or appeared in the media/political programme to express your views; been part of a community group or NGO to resolve problems in your local area. Voted in the Constituent Assembly election of April 2008 was the format of this question is different from the other items.

¹² 'Normally how often do you discuss political matters/issues with the following types of people: Friends; family members; neighbours; co-workers?'

¹³ 'Do you know who the current Prime Minister of Nepal is?'; 'Do you know what political party the current Prime Minister belongs to?'

¹⁴ 'If I want to, I can go to the media to express my views'; 'If I want to, I can take part in political activities without any fear of intimidation.'

¹⁵ 'How often do you listen to Sajha Sawal on the radio?'; 'When did you last listen to Sajha Sawal?'

¹⁶ 'On average, how long do you listen to Sajha Sawal on the radio?'

Analysis was conducted using multiple regression by the test-enter method, looking at the significance test of the R^2 change for each variable entered into the regression model. In order to ensure that all the assumptions of regression were met, the distribution of the outcome variables was checked. Although there was slight positive skewing, the data was acceptable. The distribution of the predictor variables was also checked, and there was some skewing of the data. In order to verify that the residuals of these variables were normally distributed, the R^2 change values were compared to the t-test statistic in each case. Homoscedasticity checks were made, as well as collinearity statistic checks. R^2 reported in this paper's results section has been adjusted for the number of predictor variables included in the model. The term R^2 instead of 'adjusted R^2 ' has been used throughout for simplicity of reporting.

2.1 Checking regression assumptions:

For each model:

- Collinearity diagnostics were acceptable.
- T-test statistics all agreed with the R^2 change value.
- Homoscedasticity was acceptable.

2.2 Regression findings

2.2.1 Analysis stage one – formal political participation

Model 3 shows the standardised beta coefficients when all significant covariate and demographic variables are included in the model; the individual effect of each of these variables (significant effects only) when all others are held constant is described below.

Covariate variables:

For every increase of 1 standard deviation (SD) in exposure there is a 13.2% SD increase in formal participation, when all other units are held constant. For every increase of 1 SD in interest in politics there is a 12.5% SD increase in formal participation, when all other units are held constant. For every increase of 1 SD in freedom to act there is an 18.4% SD increase in formal participation, when all other units are held constant. For every increase of 1 SD in high political knowledge there is an 8.4% SD increase in formal participation, and for every increase of 1 SD in medium political knowledge there is a 3.5% SD increase in formal participation. For every increase of 1 SD in discursive participation there is a 28.8% SD increase in formal participation.

Demographic variables:

For every increase of 1 standard deviation (SD) in sex there is a 4.3% SD decrease in formal participation, when all other units are held constant. Therefore being female is associated with a decrease in formal participation. For every increase of 1 SD in literacy there is an 8.3% SD decrease in formal participation, when all other units are held constant. Therefore an increase in age is associated with a decrease in formal participation.

2.2.2 Analysis stage one – discursive political participation

Model 3 shows the standardised beta coefficients when all significant covariate and demographic variables are included in the model; the individual effect of each of these variables when all others are held constant is described below.

Covariate variables:

For every increase of 1 standard deviation (SD) in exposure there is a 6.5% SD increase in discursive participation, when all other units are held constant. For every increase of 1 SD in interest in politics there is a 44.1% SD increase in discursive participation, when all other units are held constant. For every increase of 1 SD in freedom to act there is a 5.1% SD increase in discursive participation, when all other units are held constant. For every increase of 1 SD in high political knowledge there is a 4.9% SD increase in formal participation. For every increase of 1 SD in formal participation there is a 21.9% SD increase in discursive participation.

Demographic variables:

For every increase of 1 standard deviation (SD) in sex there is a 16.9% SD decrease in discursive participation, when all other units are held constant. Therefore being female is associated with a decrease in formal participation. For every increase of 1 SD in age there is a 5.4% SD increase in discursive participation, when all other units are held constant. Therefore an increase in age is associated with an increase in discursive participation.

2.2.3 Analysis stage two – discursive political participation

Model 3 shows the standardised beta coefficients when all significant covariate and demographic variables are included in the model; the individual effect of each of these variables (significant effects only) when all others are held constant is described below. The outcome variable for radio exposure in this model was scored in the opposite direction therefore a negative beta coefficient represents an increase in participation.

Covariate variables:

For every decrease of 1 standard deviation (SD) in exposure there is an 11.1% SD decrease in formal participation, when all other units are held constant. For every increase of 1 SD in interest in politics there is a 14.7% SD increase in formal participation, when all other units are held constant. For every increase of 1 SD in freedom to act there is an 11.1% SD increase in formal participation, when all other units are held constant. For every increase of 1 SD in discursive participation there is a 29.3% SD increase in formal participation.

Demographic variables:

For every increase of 1 SD in sex there is a 9.3% SD decrease in formal participation, when all other units are held constant. Therefore being female is associated with a decrease in formal participation. For every increase of 1 SD in literacy there is an 11.4% SD decrease in formal participation, when all

other units are held constant. Therefore being illiterate is associated with a decrease in formal participation.

2.2.4 Analysis stage two – discursive political participation

Model 3 shows the standardised beta coefficients when all significant covariate and demographic variables are included in the model; the individual effect of each of these variables (significant effects only) when all others are held constant is described below. The outcome variable for radio exposure in this model was scored in the opposite direction therefore a negative beta coefficient represents an increase in participation.

Covariate variables:

For every decrease of 1 standard deviation (SD) in exposure there is a 13.5% SD decrease in discursive participation, when all other units are held constant. For every increase of 1 SD in interest in politics there is a 33.2% SD increase in discursive participation, when all other units are held constant. For every increase of 1 SD in formal participation there is a 24.4% SD increase in discursive participation.

Demographic variables:

For every increase of 1 standard deviation (SD) in sex there is a 13.9% SD decrease in discursive participation, when all other units are held constant. Therefore being female is associated with a decrease in discursive participation. For every increase of 1 SD in age there is a 7.9% SD increase in discursive participation, when all other units are held constant. Therefore an increase in age is associated with an increase in discursive participation.

Acknowledgements

This Working Paper was written by Chris Larkin and Rhian Were. The authors would like to thank David Jodrell and Sara Elias for their input with analysis and reviewing literature, respectively, and also Kavita Abraham Dowsing, James Deane, Anna Godfrey and Diana Shaw.

BBC Media Action is the BBC's development charity. We believe in the power of media and communication to help reduce poverty and support people in understanding their rights. Our aim is to inform, connect and empower people around the world. We work in partnership to provide access to useful, timely, reliable information. We help people make sense of events, engage in dialogue, and take action to improve their lives.

The content of this Working Paper is the responsibility of BBC Media Action. Any views expressed in this paper should not be taken to represent those of the BBC itself, or of any donors supporting the work of the charity.

This working paper was prepared with funding from the UK Department for International Development which supports the policy and research work of BBC Media Action.

© BBC Media Action 2013