International Journal of Communication 12(2018), 2191–2211 1932–8036/20180005

"Digital Citizenship" Revisited: The Impact of ICTs on Citizens' Political Communication Beyond the Western State

MARTIN EMMER
MARLENE KUNST[1]
Weizenbaum Institute for the Networked Society, Germany

The role of ICTs in political participation has been a core topic in political communication research for about two decades. Numerous studies have tested whether the enthusiasm about the mobilizing impact of ICTs holds true. Most have been conducted in Western countries and, therefore, reflect a Western-centric understanding of politics and participation. Although these studies have provided insight into the potential of ICTs for established democracies, political and cultural contexts from developing world regions such as sub-Saharan Africa (SSA) have thus far been neglected. However, given the rapid dissemination of ICTs (e.g., mobile phones) and their innovative application in everyday life in developing countries, regions like SSA should be of particular interest for research in this field. This article aims to highlight the shortcomings of Western research and to recommend adjustments in future efforts to investigate effects of ICTs, including developing world regions, in order to develop a more robust empirical grounding for theories of participation.

Keywords: political participation, civic participation, digital citizenship, sub-Saharan Africa, ICT

In early January 2008, riots broke out in Kenya after accusations of fraud in the national elections of December 27, 2007. More than 1,000 people died, and hundreds of thousands were forced to flee the zones of violence (Rawlence, Albin-Lackey, & Neistat, 2008). Initially, this event fed the stereotypical image of African chaos: a society doomed to violence and poverty, incapable of developing sustainable peace and democracy. In this case, however, within a few days, a group of Kenyans approached the problem with the help of digital technology. As a result, the mobile-based crowdsourcing platform Ushahidi (a Swahili word for *witness*) was born, inviting citizens to send in their observations of violent election-related events by text messaging (Goldstein & Rotich, 2010). Given the high level of participation, Ushahidi made even the smallest events of violence in the remotest areas of the country visible on

Martin Emmer: martin.emmer@fu-berlin.de
Marlene Kunst: marlene.kunst@fu-berlin.de
Date submitted: 2017–06–25

[1] The authors contributed equally to this work.

national and global levels. Thus, the perpetrators and officials were held accountable and could no longer deny their responsibility.

The example of Ushahidi illustrates new and innovative forms of political participation, enabled through ICTs and invented by citizens in the Global South. Interestingly, these southern bottom-up innovations have proven to be useful in industrialized countries as well: During the past few years, Ushahidi has been further developed and applied in many other contexts and regions (e.g., to map crises after earthquakes in Turkey and Chile, to track corruption in Macedonia, or to map blocked roads after a snowstorm in Washington, DC; Fildes, 2010; Giridaharadas, 2010; Puhl, 2013). However, political communication scholars have not paid much attention to these innovative and digital forms of citizen participation originating in non-Western countries. Instead, beyond some case studies (see above), researchers still concentrate mainly on traditional indicators of political participation and communication, such as voting, political campaigning, and protest (Bakker & de Vreese, 2011; Dimitrova, Shehata, Strömbäck, & Nord, 2014; Holt, Shehata, Strömbäck, & Ljungberg, 2013). Ushahidi, however, is not an isolated case. A glimpse at the Global South showed that in countries with less established political and civic structures, citizens use ICTs in a more creative and unconventional manner than people in Western countries (Wasserman, 2011). Thus, when ignoring these regions, political communication scholars likely fail to understand the full potential that ICTs have for participation and miss out on inspirational applications that might be transferable to Western countries and encourage a learning process from the south to the north. As Van Aelst et al. (2017) put it, the lack of political research outside the United States and Europe "seriously hampers our understanding of the global situation as well as of the antecedents and consequences of various political communication phenomena" (p. 20).

Given the strong focus on Western countries in the history of communication research, many scholars already have requested a "de-Westernization" of the research field (Tapas, 2012; Waisbord, 2015; Waisbord & Mellado, 2014; Wang, 2011). Not only non-Western communication scholars (M'Bayo, Sunday, & Amobi, 2012; Zayani, 2012) but also prominent Western scholars, such as Hallin and Mancini (2011), have reflected on indigenous knowledge, non-Western theory building, and research in peripheral countries. Hallin and Mancini (2011) have responded to the request for de-Westernization by applying their media system frameworks to non-Western countries, thus illustrating the limitations of analyzing non-Western contexts from Western perspectives. In the end, whereas knowledge embedded and generated in local communities is important to understand the subjective meaning of ICTs and their unique applications, comparative approaches are particularly valuable to identify the peculiarity and universality of findings. Thus, studying whether findings about the impact of ICTs in Western countries hold true in the very different context such as sub-Saharan Africa (SSA) can serve as a testing ground for the universality of Western arguments (Polikanov & Abramova, 2003). However, regarding media effects, which is a particular Western field of communication research (Waisbord & Mellado, 2014), developing countries, thus far, have rarely been included in comparative research. This is why, beyond theoretical and qualitative research from a de-Westernization perspective, quantitative and comparative research on media effects deserves more scholarly attention.

Based on these considerations, this article focuses on two general questions: First, what is the overall picture that emerges from the global state of research on ICTs and political participation, and how

Westernized is our knowledge in this field? Second, does the research on ICTs and participation in developing countries (with a focus on SSA) differ from that in Western countries, and what potential does this research have to expand our knowledge of the phenomenon? Based on the answers to these two questions, we draw a conclusion regarding directions for future research in the field.

The article is divided into two main parts. In the first part, we review the global state of research on the effects of ICTs on citizen participation. The aim of this step is to assess which variables and concepts scholars (mostly Western) have mainly focused on and how universal and generalizable the respective findings may be. In the second part, we review research on ICT use in SSA to identify the different emphases and research interests in non-Western contexts. Through this two-pronged approach, we explore new dimensions of participation that have so long been ignored by Western research. Thus, we focus on the micro level of political communication, meaning the effects of ICTs on individuals, although we acknowledge that this epistemic approach may be fruitful for other levels of analysis as well. We define participation from a political communication perspective, which integrates the whole field of information and interpersonal communication activities by citizens for political or civic purposes. The inclusion of civic participation is of particular interest when reviewing the non-Western literature, as we argue that the Western perspective on "the political" is parochial because in developing countries and less established democracies civic activities may be more relevant for the political sphere. Although in this article we focus on SSA for reasons of research economy, the general findings and our conclusions about future directions for research apply to most other non-Western regions as well.

"Digital Citizenship" and the Significance of ICTs for Individual Political Communication

Since the early days of Internet research, studies on the effects of Internet and ICT use on individuals and society have focused strongly on politics, political communication, and participation. One reason is that all of the stages and levels of the political process are marked by communication, making the dramatic changes in the communication environment through ICTs an extremely important area of interest. Thus, studies on the digitalization of society focus to a great extent on political communication, which is why we think it is a viable starting point for analysis. However, the approach of this article would be just as fruitful for any other sphere of social life.

Compared with traditional interpersonal or mass communication media, ICTs extend our options for communication dramatically. ICTs provide a sphere of almost unlimited information; allow for new configurations of communication relations; combine synchronous and asynchronous communication; enable communication partners to interact with each other; reduce cost, time, and space limitations of communication; and integrate textual and audiovisual content (Abramson, Arterton, & Orren, 1988; Morris & Ogan, 1996). As a result, communication becomes networked and interactive, extending the available repertoire for individuals, as well as organizations, in the political sphere. These new opportunities of communication enable what we call "digital citizenship": People in a society with access to digital and networked media (provided by ICTs) can exert their citizen role using digital technologies (Bennett, 2008; Mossberger, Tolbert, & McNeal, 2008). In taking on the digital citizen role, individuals can participate in a democratic domestication of the digital sphere, extending their established practices and behaviors in the digital sphere and developing new forms of activity at the same time. However, the substance of the term

digital citizenship is neither static nor identical in all countries and social contexts, as it depends on citizens' practices.

State of Research I: Effects of ICTs on Individual Political Communication

In the following section, we analyze the global state of research in the basic dimensions of empirical effects research. First, we identify the usual definition and operationalization of the independent variable: How do researchers study ICTs as the cause of changes in political communication and participation? Second, using the same logic, we give an overview of the common dependent variables: What political communication phenomena are researched? Third, we review the contextual, intervening, and moderating variables that are considered relevant in empirical research.

The Independent Variables of ICT Effects Research

Initially, the most common independent variable of early quantitative studies about the impact of ICTs on political communication has been access to the Internet (Calabrese & Borchert, 1996; December, 1996). Similarly, theoretical concepts such as the *digital divide* mainly have referred to the unequal access to technology (Brown, Barram, & Irving, 1995; van Dijk, 2000). Scholars also have paid attention to the inequalities in access to ICTs between different world regions, including developing countries (Morris & Ogan, 1996; Norris, 2001).

A general problem of empirical studies that have applied Internet access as an independent variable is that such operationalization does not live up to the "multifaceted" character of ICTs (Morris & Ogan, 1996). Aware of this limitation, scholars have advanced the operationalization of the independent variable. A frequent independent variable became "use of the Internet," which has the advantage of scalability—in days per week, hours per day, kinds of content, and so on (Johnson & Kaye, 2003; Kenski & Stroud, 2006). Moreover, authors from Western and non-Western countries (e.g., Egypt and Russia) have differentiated between the use of specific types of online media, such as news websites, podcasts, social network sites, or blogs (Y. Kim, Hsu, & Gil de Zúñiga, 2013; Toepfl, 2013; Tufekci & Wilson, 2012). In addition, attention is frequently paid to different modes of use, such as consuming information or interacting with others (Bimber & Copeland, 2013; Chan, 2014).

The Dependent Variables of ICT Effects Research

Most studies on ICTs and political communication are predominantly concerned with behavioral changes. Thus, scholars frequently use classic definitions such as that of Verba, Schlozman, and Brady (1995), according to which "political participation refers to any (legal) activity that has the intent or effect of influencing government action" (p. 38). The variables of offline participation (e.g., voting or attending a political rally) are undisputed and draw on the deep-seated tradition of democracy research in Western, established systems (Barnes, 1981; Mossberger et al., 2008; Putnam, 2000; Verba & Nie, 1987; Verba et al., 1995). In contrast, it is still a matter of debate whether online activities should be considered real political participation (Anduiza, Cantijoch, & Gallego, 2009).

Whereas a range of studies have focused on the effects of ICTs on offline participation (Abramson et al., 1988; Campbell & Kwak, 2010, 2011; Gibson & McAllister, 2012; Holt et al., 2013), other authors have argued that online activities need to be taken into account to depict modern political participation (Bakker & de Vreese, 2011; Gil de Zúñiga, Veenstra, Vraga, & Shah, 2010). In many of the studies (most also carried out in the United States), however, the dependent variable was operationalized as an index consisting of activities in the online and offline spheres (Bachmann, Kaufhold, Lewis, & Gil de Zúñiga, 2010; Bakker & de Vreese, 2011; Bode, 2012; Bode, Vraga, Borah, & Shah, 2014; Evans & Ulbig, 2012; Sung Woo & Gil de Zúñiga, 2014; Vissers & Stolle, 2014).

Finally, in studies from diverse countries, including the United States and Canada but also less developed ones such as Colombia, authors have observed that online activities can spill over to the offline sphere and that the two spheres should not be treated as completely separate (Bode et al., 2014; Gibson & McAllister, 2012; Rojas, Puig Abril, Wright, & Berrio, 2009; Vissers & Stolle, 2014). In a rare longitudinal panel study conducted in Germany, Emmer, Vowe, and Wolling (2011) found very few cross-sectional influences over time between the online and offline worlds.

Despite the importance of ICT, the cognitive effects of Internet use have not been as extensively researched as the impact on behavior. However, cognitive variables may be regarded as more universal and less dependent on cultures. Therefore, research findings in this field may be less biased toward Western contexts.

One line of research, with studies in countries such as the Netherlands and the United States, examines whether Internet use has an effect on political knowledge (Kenski & Stroud, 2006), political interest (Kruikemeier, van Noort, Vliegenthart, & de Vreese, 2014), or political attitudes (Bailard, 2011). Another relevant question, which has been investigated in Western and non-Western countries, is whether ICTs have an impact on citizens' satisfaction with democracy. In this context, Bailard (2011) found that greater ICT use in democratically labile countries is associated with more critical attitudes toward the democratic performance of the government. In contrast, in stabile democracies, citizens' satisfaction with their political system increases with increased ICT use (Bailard, 2011). Moreover, in a multilevel approach that included various African and Asian countries, Nisbet, Stoycheff, and Pearce (2012) found that in democratic states there is a more robust relationship between Internet use and citizens' demand for democracy than in nondemocratic states. These results show that, other than expected above, even the effect on cognitive variables might strongly differ because of different regional and political contexts.

In studies from countries such as the United States, Germany, and Taiwan, another well-researched cognitive variable is the feeling of empowerment in the form of self-efficacy (Chan, 2014; Hoffmann, Lutz, & Meckel, 2015; Hsieh & Li, 2014; Johnson & Kaye, 2003; Kenski & Stroud, 2006; Lee, 2006; Weaver Lariscy, Tinkham, & Sweetser, 2011). Authors commonly have concluded that self-efficacy might increase because of the new opportunities on the Internet to interact with others and access information. The same applies to social capital, which is researched particularly in the context of social media use (Bode et al., 2014; Gil de Zúñiga, 2012; Hargittai & Shaw, 2013).

The Contextual Factors of ICT Effects on Individual Political Communication

Researchers have increasingly been paying attention to contextual and intervening factors in the causal effects chain. Most studies control for demographic variables (e.g., gender, age, education) and other relevant predispositions, such as political knowledge, political efficacy, party identification, or political interest (Bachmann & Gil de Zúñiga, 2013; Bachmann et al., 2010; Bakker & de Vreese, 2011). By including such variables, researchers (particularly in the United States) have shed light on the digital divide within societies, which builds on the assumption that a specific segment of the population benefits from digitalization more than others (Hoffmann et al., 2015; Min, 2010; Norris, 2001).

Research has shown that although there are almost no economic barriers to ICT access in wealthy industrialized countries anymore (although Anduiza, Gallego, and Cantijoch [2010] showed that in Spain, Internet use is still conditioned by resources such as income), various other factors are responsible for maintaining a digital divide within countries. Due to a wide range of empirical evidence from countries such as Finland, the Netherlands, and the United States, it is, for instance, uncontested that the Internet is more likely to be used for political communication by people with high socioeconomic status and political knowledge (Best & Krueger, 2005; Brundidge & Rice, 2009; Christensen, 2011; Dimitrova et al., 2014; Hoffmann et al., 2015; Kruikemeier et al., 2014; Norris, 2001; Oser, Hooghe, & Marien, 2013). Moreover, the skills, experience, and comfort for using ICTs are frequently mentioned as predictive variables for political communication in research from the United States (Campbell & Kwak, 2010; Hargittai & Shaw, 2013; Min, 2010).

Finally, many studies conducted on the Internet and engagement have used national (particularly U.S.) elections as a research context (Bode, 2012; Chan, 2014; Christensen, 2011; Dimitrova et al., 2014; Johnson & Kaye, 2003; Kenski & Stroud, 2006; Kruikemeier et al., 2014; Tolbert & McNeal, 2003), which determines the focus of independent and dependent variables (Johnson & Kaye, 2003; D. Kim & Johnson, 2006; Norris & Sanders, 2003; Smith & Rainie, 2008; Weaver & Drew, 2001). Given this contextualization, these studies might be representative of neither ICT and political communication in ordinary times nor non-Western contexts.

State of Research II: ICTs and Individual (Political) Communication in the African Context

Although the rapid dissemination of ICTs in Africa (with hot spots occasionally referred to as "Silicon Savannah") has received some attention from the media and expert communities, the lack of substantial research is startling. Certainly, ICTs in Africa have manifold dimensions (e.g., e-health, e-commerce, and e-governance) that are of concern to the respective academic disciplines (e.g., health studies, business studies, or political science; Unwin, 2009). These studies are, however, highly fragmented and mainly applied case study or action research approaches and, therefore, mostly found no entry in the global state or research. Another characteristic of ICT research in SSA is that many of the scarce empirical studies on ICT use and effects are from South Africa (Chigona, Kamkwenda, & Manjoo, 2008; Hyde-Clarke & Tonder, 2011; Oyedemi, 2015). However, South Africa cannot represent SSA, as the country is a unique case because of the history of apartheid and a strong economy (although wealth is distributed highly unequally).

In the following, we apply the same structure as above by separating the different variables that define media effects research in the SSA context. Here, some studies briefly mentioned above are discussed in more detail. However, almost no studies have applied a classic explanatory approach of effects research with dependent and independent variables in the SSA context. Instead, most of the research is descriptive, exploratory, or qualitative. Nonetheless, we try to sort out the concepts and variables according to this logic so as to compare the foci of research with what we know from Western scholarship. Moreover, most empirical research from the African region on ICTs has not focused on political communication, which is why the following review includes studies on digital media use in general. The review of diverse studies provides guidance for future political communication research in the African context, as they shed light on specific patterns of digital media use and specific foci of African communication research. A second argument for widening the scope beyond classical political phenomena is that this category is strongly predefined by Western-centric research itself (see above; e.g., the strong emphasis on U.S. elections and sets of conventional, unconventional, etc., participation behaviors). Taking a wider field of social practices into account, there is a higher chance of identifying specific African perspectives on ICT use in a civic (if not political) context. Activities that a Western perspective would classify as civic or social might be highly political in their respective regional context.

The Independent Variable of ICT Effects Research in SSA

The first major and apparent difference from Western research is the focus on mobile phones or mobile Internet access in studies of ICTs in SSA. Chigona et al. (2008) conducted a qualitative uses and gratifications study with university students from South Africa, exploring the gratifications of using mobile devices for accessing the Internet. The specific forms and patterns of mobile phone use in SSA was also the focus of a study by Burrell (2010), who described the very common sharing of ICT devices in Uganda as a result of a lack of individual resources and skills. Moreover, Abraham (2009) studied mobile phone use in women's rights advocacy in Zambia, and Donner (2007) explored the practice of "beeping" (referring to the request for a return call by calling someone and hanging up before that person picks up the call) with a qualitative study.

This emphasis is not surprising, as recent years have seen rapid growth in mobile phone use in SSA due to the lack of landline infrastructure (Tortora, 2014). Whereas an unverified statistic stated that in 1990, Manhattan had more telephone lines than the African continent (Shapshak, 2012), in 2013, 80% of urban households in SSA had at least one mobile phone (63% of rural households; Tortora, 2014). Moreover, mobile broadband penetration is increasing particularly fast in the developing world, making it the "fastest growing technology in human history" (United Nations, 2013, para. 9). Yet, despite these positive developments, one should not ignore the fact that approximately 4 billion people in the world are not regular Internet users, 90% of whom live in developing countries (International Telecommunication Union, 2014). In 2013, in the 49 least developed countries (of which about two-thirds are located in SSA), as many as 90% of inhabitants were unconnected, in contrast to the top 10 countries where 90% of the population had access to the Internet (United Nations, 2013).

The potential of mobile phones for the development of SSA gets more salient when considering that for African citizens these devices are not just an upgrade of a fixed phone. Thus, from an empirical

perspective, a "before–after" analysis of interpersonal communication behavior would be meaningless, as most people never had a landline number. This also implies that mobile phones are much more of a personal revolution for citizens in SSA (particularly as mobile broadband technology is becoming more common) than for citizens of Western countries. Scholars have discussed the theoretical promises mobile phones could have for the democracy in African countries and the participation of citizens (Brinkman, Nyamnjoh, & Burjin, 2009; Wasserman, 2011). However, given that systematic, quantitative, and comparative research, let alone methodological sound studies on effects, are scarce, only a few empirical findings have confirmed these hypotheses (Martin, 2014).

Nonetheless, some comprehensive although mostly descriptive studies have provided insight into general Internet use patterns, for example, surveys by Oyedemi (2012, 2015) among South African students with a focus on discovering the reasons for inequalities in use. The results showed that most students use the Internet for academic activities, online information searches, social networking, communicative activities such as sending text messages to cell phones, sending and receiving e-mails, and online chats, whereas fewer students (about half) use the Internet to find information on government services or to contact officials (Oyedemi, 2015). Moreover, a comparative study by the Pew Research Center (2014) examined the general use and evaluation of the Internet by citizens in several countries, including some in SSA. The study showed that on social networks more African citizens share their views on movies and music than their views on politics. Social media in SSA have attracted the interest of scholars as well. Kamau (2017) analyzed the effect of social media use among Kenyans on political participation. He differentiated in a detailed manner among different social media activities, such as sharing a post, joining a group on Facebook, or commenting on another person's political post. In a qualitative study, Hyde-Clarke and Tonder (2011) analyzed Facebook as a tool for South African media students to discuss media-related issues. In a rare example of quantitative research, Bosch (2013) analyzed the interconnections of Facebook use by South African youth with political participation.

Overall, the lack of empirical and particularly quantitative research can be partly ascribed to the difficult conditions for communication research in SSA. The costs of quantitative and representative studies and the lack of survey data for secondary analysis (e.g., in contrast with U.S. research, which frequently draws on data from American election studies) are strong impediments to this kind of research. Thus, many researchers have used student samples and narrowly focused or descriptive designs with no testing of hypotheses. Although studies differentiated between mode of use and type of media, due to the absence of statistical inference, they provided no insight into their respective impact. However, research has illustrated several peculiarities of ICT use in SSA, such as the importance of mobile communication and special patterns of use that are not known from Western research (e.g., sharing mobile phones or practices such as beeping).

The Dependent Variables of ICT Effects Research in SSA

Given the lack of statistical inference, the knowledge of how ICTs might affect political communication in SSA is limited. The question whether individual use of ICTs has a causal influence on political communication and by what means citizens in SSA are adopting digital media in their everyday lives has rarely been approached with appropriate methodology. In general, the knowledge on the impact

of ICTs on political communication in African countries is largely based on the subjective assessment of experts from African civil society organizations instead of empirically verifiable findings from the field (Mudhai, 2004; van Rensburg, 2012). With this said, as we can draw on only a few quantitative studies, we also have to take into account qualitative studies to understand the different perspectives of studies in SSA. Furthermore, it may be appropriate to widen the perspective to studies that analyze ICT effects variables other than political variables in the Western sense.

The few studies on ICTs and participation in SSA that applied a generalizable, quantitative design focused on topics that are more relevant in SSA than in Western countries (although the topics are not absent in this part of the world either). Bailard (2009, 2012), for instance, studied effects of ICTs on the perceived fairness of elections and on corruption. These dependent variables reflected the specific issues of many developing countries, where variables such as writing to a political official might be perceived as inefficient. If citizens consider their government corrupt, they might not see any use in contacting government officials. In contrast, a recent study by Kamau (2017) analyzed the effect of social network use in Kenya on political participation and applied dependent variables such as voting, attending political events, or contacting politicians that are identical to those applied in Western studies. The author found that the use of social media and political participation are positively related, but due to the cross-sectional nature of the study, the data did not provide evidence of causality. This traditional conceptualization of political participation shows that many variables known from Western research can be relevant for democratic systems in SSA as well. Thus, instead of neglecting these variables, it seems meaningful to enrich the concept of political participation with variables from the context of SSA. Alternatively, variables from Western contexts can be modified to suit the African context. In this regard, an interesting variation of the variable "contacting politicians" was used in Grossman, Humphreys, and Sacramone-Lutz's (2014) field experiment in Uganda. The authors analyzed which effect access to mobile phones had on the number of citizens who send text messages to politicians. The study observed a flattening effect: When given access to mobile phones, a greater share of the marginalized segments of the population used this opportunity compared with other political communication channels. Sending text messages to politicians is an example of practices that are uncommon in Western countries but can have relevant effects in the political communication field.

As already mentioned, in addition to the few quantitative studies, a range of case studies and qualitative studies has investigated ICTs and participation in SSA. These studies mostly applied in-depth interviews to explore the meaning of ICTs for African citizens. In a qualitative study, Kalyango and Adu-Kumi (2013) investigated how netizens in Ghana, Ivory Coast, Kenya, and Uganda perceive the role of social media platforms in mobilizing citizens to participate in the political discourse. The authors found that using social media as mobilizing tools for social change in the national political discourse can provide pride and fulfillment, particularly among educated citizens. Especially in regard to monitoring elections or other forms of controlling the government, case studies explored specific applications, such as Ushahidi (Meier & Brodock, 2008; Okolloh, 2009; Wachanga, 2012). These studies mostly discussed possible contributions to democracy or participation but did not apply designs for testing respective hypotheses. However, the case of Ushahidi shows how ICTs are creatively applied by societies that are led by nontransparent and corrupt governments or that undergo violent upheavals. For empirical researchers, the challenge is to

capture these creative and non-Western forms of participation with qualitative methodology and to subsequently apply quantitative methodology to test the effects of access to ICTs.

The Contextual Factors of ICT Effects on Individual Political Communication in SSA

Previously, we referred to the current imbalance between Western and non-Western countries when it comes to access to ICTs (which is diminishing slightly through the penetration of mobile phones and mobile broadband). Given the current limitations, access is a more important contextual variable in SSA than in Western countries. Thus, some quantitative, descriptive studies offer basic data on the restrictions of access (e.g., costs and conditions, such as the often limited disposability of electricity in SSA) and the consequences for use (Gillwald, 2013; Oyedemi, 2012, 2015). Notably, Oyedemi (2015) investigated access conditions and asked whether students in South Africa have Internet access at home or through their mobile phones or the computer lab on campus. The different conditions were correlated to specific kinds of use: Black students were the least likely to have access to household Internet and the least likely to use the Internet for social and economic activities (Oyedemi, 2015). Naturally, factors influencing access to ICTs are of greater concern in the African context because of the financial limitations of large segments of society. Whether citizens have access to ICTs has consequences that may reinforce the digital divide within the countries. Oyedemi (2014) found that those who had access to a computer and an Internet connection at home had better digital skills, for instance, concerning finding information online. Moreover, in a sophisticated field experiment in Uganda, Grossmann et al. (2014) tested the effect of substituting the costs for text messaging on political participation. Interestingly, they found that pricing did not lead to a flattening effect between the privileged and the marginalized, as the free service leads to an equal uptake in participation for the different segments of the population. Beyond financial restrictions, other dimensions such as language, ethnicity, or illiteracy are likely to enforce the digital divide within African societies. Naturally, race is a particularly important variable in studies concerning South Africa (Oyedemi, 2012; Young, 2014).

Regarding other contextual factors, the Pew Research Center (2014) study investigated for what purposes people use the Internet. In this context, researchers asked for attitudinal variables, such as whether citizens perceived the Internet to have a positive or negative influence on society (e.g., in regard to politics, education, or morality). The attitude of African citizens toward ICTs has also been investigated in other studies, for example, concerning whether citizens consider ICTs to have the potential to leapfrog stages of development (Hyde-Clarke & Tonder, 2011) or whether they trust social media, such as Facebook (Bosch, 2013). Most of these studies, however, were also descriptive and did not analyze causal relations of these variables for political communication.

Conclusion

As our review has shown, SSA to a large extent is still a blind spot in terms of systematic and empirical research on ICTs and participation. Only a few studies have contributed to a more general understanding of the role of ICTs in participation from the perspective of a developing country. However, how ICTs change the civic and political participation of ordinary African citizens, potentially empowering them to change their living conditions and societies from below, may be an important issue for the

continent's future. Moreover, there are many reasons to believe that African citizens are sometimes ahead of Westerners when it comes to ICTs and participation. It is particularly likely that the Global North can learn from the Global South about the potential of mobile media use for participation, as Africans for many reasons seem to apply these devices more creatively. Unfortunately, many activities that are enabled through mobile communication in SSA have thus far been neglected by quantitative political communication research. In countries in SSA with limited statehood, citizens, for example, increasingly engage in collaborative action to provide collective goods (Livingston & Walter-Drop, 2012). This type of alleged civic participation, which replaces functions of the state, is highly political and needs to be acknowledged as such. Against this backdrop, it is likely that with our review of the current and scarce quantitative and qualitative studies in SSA, we captured only a fraction of the participatory activities in the region. This is why we strongly encourage more qualitative and theoretical work in this field, which can provide quantitative researchers with more substantial knowledge about what to research and avoid the common mistake of restricting their own perspective to Western concepts.

What does this mean for the future of political communication research? There is a much broader variety of factors in the field than documented in the global state of research, which has to be taken into account when carrying out empirical research. This means that the general goal at the moment is not (yet) to develop a universal model that can be applied to every context but to increase the diversity of concepts and variables to gain insight into the full potential of ICTs for the Global North and South.

With this in mind, first, it must be recognized that the gateways of participation in the Global South might be different from those in Western countries. In regard to SSA, researchers must avoid the common problem of scientists who study African politics, which is to assume that the point of origin is the Western state and its formal institutions (Hyden, 2013). In the end, communication scholars must take on the challenge Hyden (2013) described for research within political science:

> How does one compare a phenomenon in a distant part of the world with what is known from one's own country without losing sight of potential differences? Are there categories for analytical purposes that simultaneously do justice to African as well as American—or European—realities? . . . Compressing African data into preconceived boxes deducted from empirical evidence elsewhere is often problematic. African realities force the honest scholar into an inevitable stretching of the discipline's more universally accepted concepts. (pp. 3–4)

Thus, another challenge is to redefine the term *participation* and expand it from a non-Western perspective. For instance, the initial example of Ushahidi demonstrates that participation in SSA can mean controlling the state rather than reaching out to it. These forms of participation do not comply with Verba and colleagues' (1995) definition, according to which participation is an activity that aims to directly influence the ordinary political process. In the end, the aim would have to be to consider political communication from the perspective of people living in countries in SSA: What is a politically relevant action in the eyes of citizens?

Second, when it comes to devices, more attention must be paid to mobile technology. Scholars must take into account the specific features and modes of use of this technology to understand which characteristics cause participatory effects. This would imply rethinking the independent variable, as, among others, sharing of mobile phones or text messaging must be included. As there is not much research from Western countries on the effects of mobile phones on participation, in this field of research there is an opportunity to begin the operationalization from scratch and not predetermined by Western traditions. Thus, researchers could develop concepts and variables of "mobile participation" that will not disadvantage a non-Western context by developing it in Western terms.

Third, contextual factors strongly influence whether ICTs have an impact on participation and must be taken into account when researching the potential of ICTs. For instance, variables such as access and pricing are certainly more important in SSA than in Western countries. Moreover, as election fraud and corruption among politicians are problems of greater significance in SSA, variables such as trust in the political system might be low and influence the way ICTs are applied for political communication. This could, for instance, lead to decreased use of ICTs for conventional political participation but to increased use of ICTs for allegedly civic participation (e.g., organizing public services, which the state fails to provide). A comparative approach between the Global North and the Global South is promising in order to cover the broad variety of possible context factors that may influence political communication in different parts of the world.

Fourth, local expertise is required to identify the contextual factors of highest significance in SSA. Against this background, more cooperation between scholars from the Global North and the Global South is necessary. Such cooperation would also contribute to a higher visibility of researchers from the Global South and counteract the Western dominance and misconceptions in political communication research.

References

Abraham, K. B. (2009). The names in your address book: Are mobile phone networks effective in advocating women's rights in Zambia? In I. Buskens & A. Webb (Eds.), *African women and ICTs investigating technology, gender and empowerment* (pp. 97–104). London, UK: Zed Books.

Abramson, J. B., Arterton, F. C., & Orren, G. R. (1988). *The electronic commonwealth*. Cambridge, MA: Harvard University Press.

Anduiza, E., Cantijoch, M., & Gallego, A. (2009). Political participation and the Internet. *Information, Communication & Society, 12*(6), 860–878. doi:10.1080/13691180802282720

Anduiza, E., Gallego, A., & Cantijoch, M. (2010). Online political participation in Spain: The impact of traditional and Internet resources. *Journal of Information Technology & Politics, 7*(4), 356–368. doi:10.1080/19331681003791891

Bachmann, I., & Gil de Zúñiga, H. (2013). News platform preference as a predictor of political and civic participation. *Convergence: The Journal of Research Into New Media Technologies, 19*(4), 496–512. doi:10.1177/1354856513493699

Bachmann, I., Kaufhold, K., Lewis, S. C., & Gil de Zúñiga, H. (2010). News platform preference: Advancing the effects of age and media consumption on political participation. *International Journal of Internet Science, 5*(1), 34–47.

Bailard, C. S. (2009). Mobile phone diffusion and corruption in Africa. *Political Communication, 26*(3), 333–353. doi:10.1080/10584600903053684

Bailard, C. S. (2011). Testing the Internet's effect on democratic satisfaction: A multi-methodological, cross-national approach. *Journal of Information Technology & Politics, 9*(2), 185–204. doi:10.1080/19331681.2011.641495

Bailard, C. S. (2012). A field experiment on the Internet's effect in an African election: Savvier citizens, disaffected voters, or both? *Journal of Communication, 62*(2), 330–344. doi:10.1111/j.1460-2466.2012.01632.x

Bakker, T. P., & de Vreese, C. H. (2011). Good news for the future? Young people, Internet use, and political participation. *Communication Research, 38*(4), 451–470. doi:10.1177/0093650210381738

Barnes, S. (1981). Political action: Mass participation in five Western democracies. *European Journal of Political Research, 9*(4), 421–432.

Bennett, W. L. (2008). Changing citizenship in the digital age. *Civic Life Online: Learning How Digital Media Can Engage Youth, 1,* 1–24.

Best, S. J., & Krueger, B. S. (2005). Analyzing the representativeness of Internet political participation. *Political Behavior, 27*(2), 183–216. doi:10.2307/4500191

Bimber, B., & Copeland, L. (2013). Digital media and traditional political participation over time in the U.S. *Journal of Information Technology & Politics, 10*(2), 125–137. doi:10.1080/19331681.2013.769925

Bode, L. (2012). Facebooking it to the polls: A study in online social networking and political behavior. *Journal of Information Technology & Politics, 9*(4), 352–369. doi:10.1080/19331681.2012.709045

Bode, L., Vraga, E. K., Borah, P., & Shah, D. V. (2014). A new space for political behavior: Political social networking and its democratic consequences. *Journal of Computer-Mediated Communication, 19*(3), 414–429. doi:10.1111/jcc4.12048

Bosch, T. (2013). Youth, Facebook and politics in South Africa. *Journal of African Media Studies, 5*(2), 119–130. doi:10.1386/jams.5.2.119_1

Brinkman, I., Nyamnjoh, F., & Burjin, M. D. (2009). *Mobile phones: The new talking drums of everyday Africa*. Bamenda, Cameroon: Langaa Rpcig.

Brown, R. H., Barram, D. J., & Irving, L. (1995). *Falling through the net: A survey of the "have nots" in rural and urban America.* National Telecommunication and Information Administration. Retrieved from http://www.ntia.doc.gov/ntiahome/fallingthru.html

Brundidge, J., & Rice, R. E. (2009). Political engagement online: Do the information rich get richer and the like-minded more similar? In A. Chadwick & N. Howard (Eds.), *Routledge handbook of Internet politics* (pp. 144–156). Abingdon, UK: Routledge.

Burrell, J. (2010). Evaluating shared access: Social equality and the circulation of mobile phones in rural Uganda. *Journal of Computer-Mediated Communication, 15*(2), 230–250. doi:10.1111/j.1083-6101.2010.01518.x

Calabrese, A., & Borchert, M. (1996). Prospects for electronic democracy in the United States: Rethinking communication and social policy. *Media, Culture & Society, 18*(2), 249–268. doi:10.1177/016344396018002005

Campbell, S. W., & Kwak, N. (2010). Mobile communication and civic life: Linking patterns of use to civic and political engagement. *Journal of Communication, 60*(3), 536–555. doi10.1111/j.1460-2466.2010.01496.x

Campbell, S. W., & Kwak, N. (2011). Political involvement in "mobilized" society: The interactive relationships among mobile communication, network characteristics, and political participation. *Journal of Communication, 61*(6), 1005–1024. doi:10.1111/j.1460-2466.2011.01601.x

Chan, M. (2014). Exploring the contingent effects of political efficacy and partisan strength on the relationship between online news use and democratic engagement. *International Journal of Communication, 8*(21), 1195–1215.

Chigona, W., Kamkwenda, G., & Manjoo, S. (2008). Uses and gratifications of mobile Internet among South African students: Peer-reviewed article. *South African Journal of Information Management, 10*(3), 1–10.

Christensen, H. S. (2011). The political competence of Internet participants. *Information, Communication & Society, 14*(6), 896–916. doi:10.1080/1369118X.2011.566931

December, J. (1996). Units of analysis for Internet communication. *Journal of Communication, 46*(1), 14–38. doi:10.1111/j.1460-2466.1996.tb01459.x

Dimitrova, D. V., Shehata, A., Strömbäck, J., & Nord, L. W. (2014). The effects of digital media on political knowledge and participation in election campaigns: Evidence from panel data. *Communication Research, 41*(1), 95–118. doi:10.1177/0093650211426004

Donner, J. (2007). The rules of beeping: Exchanging messages via intentional "missed calls" on mobile phones. *Journal of Computer-Mediated Communication, 13*(1), 1–22.

Emmer, M., Vowe, G., & Wolling, J. (2011). *Bürger online: die Entwicklung der politischen Online-Kommunikation in Deutschland* [Citizens online: The development of political online communication in Germany]. Konstanz, Germany: UVK.

Evans, H. K., & Ulbig, S. (2012). Social butterflies and politics: Exploring the link between sociability and political engagement, online and off. *Journal of Information Technology & Politics, 9*(4), 402–414. doi:10.1080/19331681.2012.691039

Fildes, J. (2010, March 1). Net puts Kenya at centre of Chile rescue efforts. *BBC News.* Retrieved from http://news.bbc.co.uk/2/hi/technology/8543671.stm

Gibson, R. K., & McAllister, I. (2012). Online social ties and political engagement. *Journal of Information Technology & Politics, 10*(1), 21–34. doi:10.1080/19331681.2012.712461

Gil de Zúñiga, H. (2012). Social media use for news and individuals' social capital, civic engagement and political participation. *Journal of Computer-Mediated Communication, 17*(3), 319–336. doi:10.1111/j.1083-6101.2012.01574.x

Gil de Zúñiga, H., Veenstra, A., Vraga, E., & Shah, D. (2010). Digital democracy: Reimagining pathways to political participation. *Journal of Information Technology & Politics, 7*(1), 36–51. doi:10.1080/19331680903316742

Gillwald, A. (2013). *Towards an understanding of ICT access and use in Africa.* Research ICT Africa. Retrieved from https://researchictafrica.net/presentations/Presentations/2013%20Gillwald%20-%20Towards%20an%20understanding%20of%20%20ICT%20access%20and%20use%20in%20Africa.pdf

Giridaharadas, A. (2010, March 13). Africa's gift to Silicon Valley: How to track a crisis. *The New York Times*. Retrieved from http://www.nytimes.com/2010/03/14/weekinreview/14giridharadas.html?scp=1&sq=ushahidi&st=cse&_r=0

Goldstein, J., & Rotich, J. (2010). Digitally networked technology in Kenya's 2007–08 post-election crisis. In S. Ekine (Ed.), *SMS uprising: Mobile phone activism in Africa* (pp. 124–137). Cape Town, South Africa: Pambazuka Press.

Grossman, G., Humphreys, M., & Sacramone-Lutz, G. (2014). "I wld like u WMP to extend electricity 2 our village": On information technology and interest articulation. *American Political Science Review, 108*(3), 688–705. doi:10.1017/S0003055414000331

Hallin, D. C., & Mancini, P. (Eds.). (2011). *Comparing media systems beyond the Western world.* Cambridge, UK: Cambridge University Press.

Hargittai, E., & Shaw, A. (2013). Digitally savvy citizenship: The role of Internet skills and engagement in young adults' political participation around the 2008 presidential election. *Journal of Broadcasting & Electronic Media, 57*(2), 115–134. doi:10.1080/08838151.2013.787079

Hoffmann, C. P., Lutz, C., & Meckel, M. (2015). Content creation on the Internet: A social cognitive perspective on the participation divide. *Information, Communication & Society, 18*(6), 696–716. doi:10.1080/1369118X.2014.991343

Holt, K., Shehata, A., Strömbäck, J., & Ljungberg, E. (2013). Age and the effects of news media attention and social media use on political interest and participation: Do social media function as leveller? *European Journal of Communication, 28*(1), 19–34. doi:10.1177/0267323112465369

Hsieh, Y. P., & Li, M. H. (2014). Online political participation, civic talk, and media multiplexity: How Taiwanese citizens express political opinions on the Web. *Information Communication & Society, 17*(1), 26–44. doi:10.1080/1369118x.2013.833278

Hyde-Clarke, N., & Tonder, T. V. (2011). Revisiting the "leapfrog" debate in light of current trends of mobile phone Internet usage in the Greater Johannesburg area, South Africa. *Journal of African Media Studies, 3*(2), 263–276. doi:10.1386/jams.3.2.263_1

Hyden, G. (2013). *African politics in comparative perspective.* Cambridge, UK: Cambridge University Press.

International Telecommunication Union. (2014). *ICT facts and figures: The world in 2014*. International Telecommunication Union. Retrieved from http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2014-e.pdf

Johnson, T. J., & Kaye, B. K. (2003). A boost or bust for democracy? How the Web influenced political attitudes and behaviors in the 1996 and 2000 presidential elections. *Harvard International Journal of Press/Politics, 8*(3), 9–34. doi:10.1177/1081180X03008003002

Kalyango, Y., Jr., & Adu-Kumi, B. (2013). Impact of social media on political mobilization in East and West Africa. *Global Media Journal, 12*(22). Retrieved from http://www.globalmediajournal.com/open-access/impact-of-social-media-on-political-mobilization-in-east-and-west-africa.php?aid=35907

Kamau, S. C. (2017). Democratic engagement in the digital age: Youth, social media and participatory politics in Kenya. *Communicatio, 43*(2), 128–146. doi:10.1080/02500167.2017.1327874

Kenski, K., & Stroud, N. J. (2006). Connections between Internet use and political efficacy, knowledge, and participation. *Journal of Broadcasting & Electronic Media, 50*(2), 173–192. doi:10.1207/s15506878jobem5002_1

Kim, D., & Johnson, T. J. (2006). A victory of the Internet over the mass media? Examining the effects of online media on political attitudes in South Korea. *Asian Journal of Communication, 16*(1), 1–18. doi:10.1080/01292980500467251

Kim, Y., Hsu, S.-H., & Gil de Zúñiga, H. (2013). Influence of social media use on discussion network heterogeneity and civic engagement: The moderating role of personality traits. *Journal of Communication, 63*(3), 498–516. doi:10.1111/jcom.12034

Kruikemeier, S., van Noort, G., Vliegenthart, R., & de Vreese, C. H. (2014). Unraveling the effects of active and passive forms of political Internet use: Does it affect citizens' political involvement? *New Media & Society, 16*(6), 903–920. doi:10.1177/1461444813495163

Lee, K. M. (2006). Effects of Internet use on college students' political efficacy. *Cyberpsychology & Behavior, 9*(4), 415–422. doi:10.1089/cpb.2006.9.415

Livingston, S., & Walter-Drop, G. (2012). *Information and communication technologies in areas of limited statehood* (SFB Governance Working Paper Series No. 38). Freie Universität. Retrieved from http://www.diss.fu-berlin.de/docs/servlets/MCRFileNodeServlet/FUDOCS_derivate_000000002181/WP38.pdf

Martin, J. A. (2014). Mobile media and political participation: Defining and developing an emerging field. *Mobile Media & Communication, 2*(2), 173–195. doi:10.1177/2050157914520847

M'Bayo, R., Sunday, O., & Amobi, I. (2012). Intellectual poverty and theory building in African mass communication research. *Journal of African Media Studies, 4*(2), 139–155. doi:10.1386/jams.4.2.139_1

Meier, P., & Brodock, K. (2008, October 23). *Crisis mapping Kenya's election violence: Comparing mainstream news, citizen journalism and Ushahidi*. Retrieved from https://irevolutions.org/2008/10/23/mapping-kenyas-election-violence/

Min, S.-J. (2010). From the digital divide to the democratic divide: Internet skills, political interest, and the second-level digital divide in political Internet use. *Journal of Information Technology & Politics, 7*(1), 22–35. doi:10.1080/19331680903109402

Morris, M., & Ogan, C. (1996). The Internet as a mass medium. *Journal of Communication, 46*(1), 39–50. doi:10.1111/j.1460-2466.1996.tb01460.x

Mossberger, K., Tolbert. J., & McNeal, R. (2008). *Digital citizenship: The Internet, society and participation.* Cambridge, MA: MIT Press.

Mudhai, O. F. (2004). Researching the impact of ICTs as change catalysts in Africa. *Ecquid Novi: African Journalism Studies, 25*(2), 313–335. doi:10.1080/02560054.2004.9653300

Nisbet, E. C., Stoycheff, E., & Pearce, K. E. (2012). Internet use and democratic demands: A multinational, multilevel model of Internet use and citizen attitudes about democracy. *Journal of Communication, 62*(2), 249–265. doi:10.1111/j.1460-2466.2012.01627.x

Norris, P. (2001). *Digital divide: Civic engagement, information poverty, and the Internet worldwide*. Cambridge, UK: Cambridge University Press.

Norris, P., & Sanders, D. (2003). Message or medium? Campaign learning during the 2001 British general election. *Political Communication, 20*(3), 233–262. doi:10.1080/10584600390218878

Okolloh, O. (2009). Ushahidi, or "testimony": Web 2.0 tools for crowdsourcing crisis information. *Participatory Learning and Action*, *59*(1), 65–70.

Oser, J., Hooghe, M., & Marien, S. (2013). Is online participation distinct from offline participation? A latent class analysis of participation types and their stratification. *Political Research Quarterly, 66*(1), 91–101. doi:10.1177/1065912912436695

Oyedemi, T. (2012). Digital inequalities and implications for social inequalities: A study of Internet penetration amongst university students in South Africa. *Telematics & Informatics, 29*(3), 302–313. doi:10.1016/j.tele.2011.12.001

Oyedemi, T. (2014). Beyond access: Youth and digital skills. *Communicatio, 40*(2), 137–154. doi:10.1080/02500167.2014.907191

Oyedemi, T. (2015). Participation, citizenship and Internet use among South African youth. *Telematics & Informatics, 32*(1), 11–22. doi:10.1016/j.tele.2014.08.002

Pew Research Center. (2014). *Internet seen as positive influence on education but negative on morality in emerging and developing nations.* Retrieved from http://www.pewglobal.org/2015/03/19/internet-seen-as-positive-influence-on-education-but-negative-influence-on-morality-in-emerging-and-developing-nations/

Polikanov, D., & Abramova, I. (2003). Africa and ICT: A chance for breakthrough? *Information, Communication & Society, 6*(1), 42–56. doi:10.1080/1369118032000068778

Puhl, J. (2013). Im Silicon Savannah [In Silicon Savannah]. *Der Spiegel, 48*. Retrieved from http://www.spiegel.de/spiegel/print/d-122579517.html

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon & Schuster.

Rawlence, B., Albin-Lackey, C., & Neistat, A. (2008). *Ballots to bullets: Organized political violence and Kenya's crisis of governance.* Human Rights Watch. Retrieved from https://www.hrw.org/report/2008/03/16/ballots-bullets/organized-political-violence-and-kenyas-crisis-governance

Rojas, H., Puig Abril, E., Wright, P., & Berrio, C. (2009, May). *Mobilizers mobilized: Information, expression, mobilization, and participation in the digital age.* Paper presented at the annual conference of the International Communication Association, Chicago, IL.

Shapshak, T. (2012, October 4). Africa not just a mobile-first continent—It's mobile only. *CNN.* Retrieved from http://edition.cnn.com/2012/10/04/tech/mobile/africa-mobile-opinion/index.html

Smith, A., & Rainie, L. (2008). *The Internet and the 2008 election*. Pew Research Center. Retrieved from http://www.pewinternet.org/2008/06/15/the-internet-and-the-2008-election/

Sung Woo, Y., & Gil de Zúñiga, H. (2014). Connecting blog, Twitter and Facebook use with gaps in knowledge and participation. *Comunicación y Sociedad, 27*(4), 33–48. doi:10.15581/003.27.4.33-48

Tapas, R. (2012). To de-Westernize, yes, but with a critical edge: A response to Gunaratne and others. *Media, Culture & Society, 34*(2), 238–249. doi:10.1177/0163443711432414

Toepfl, F. (2013). Making sense of the news in a hybrid regime: How young Russians decode state TV and an oppositional blog. *Journal of Communication, 63*(2), 244–265. doi:10.1111/jcom.12018

Tolbert, C. J., & McNeal, R. S. (2003). Unraveling the effects of the Internet on political participation? *Political Research Quarterly, 56*(2), 175–185. doi:10.2307/3219896

Tortora, B. (2014). *Africa continues going mobile.* Gallup. Retrieved from http://www.gallup.com/poll/168797/africa-continues-going-mobile.aspx

Tufekci, Z., & Wilson, C. (2012). Social media and the decision to participate in political protest: Observations from Tahrir Square. *Journal of Communication, 62*(2), 363–379. doi:10.1111/j.1460-2466.2012.01629.x

United Nations. (2013). Wireless broadband use up but least developed countries left behind. *UN News.* Retrieved from https://news.un.org/en/story/2013/09/449602-wireless-broadband-use-least-developed-countries-left-behind-un-reports

Unwin, T. (Ed.). (2009). *ICT4D: Information and communication technology for development.* Cambridge, UK: Cambridge University Press.

Van Aelst, P., Strömbäck, J., Aalberg, T., Esser, F., de Vreese, C., Matthes, J., . . . Stanyer, J. (2017). Political communication in a high-choice media environment: A challenge for democracy? *Annals of the International Communication Association, 41*(1), 3–27. doi:10.1080/23808985.2017.1288551

van Dijk, J. (2000). Widening information gaps and policies of prevention. In K. L. Hacker & J. van Dijk (Eds.), *Digital democracy: Issues of theory and practice* (pp. 166–183). London, UK: SAGE Publications.

van Rensburg, A. H. J. (2012). Using the Internet for democracy: A study of South Africa, Kenya and Zambia. *Global Media Journal—African Edition, 6*(1), 93–117. doi:10.5789/6-1-84

Verba, S., & Nie, N. H. (1987). *Political participation in America: Political democracy and social equality.* Chicago, IL: University of Chicago Press.

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

Vissers, S., & Stolle, D. (2014). The Internet and new modes of political participation: Online versus offline participation. *Information, Communication & Society, 17*(8), 937–955. doi:10.1080/1369118X.2013.867356

Wachanga, D. N. (2012). Participatory culture in an emerging information ecosystem: Lessons from Ushahidi. *Communicatio, 38*(2), 195–212. doi:10.1080/02500167.2012.717348

Waisbord, S. (2015). De-Westernization and cosmopolitan media studies. *Internationalizing International Communication, X*, 178–200.

Waisbord, S., & Mellado, C. (2014). De-Westernizing communication studies: A reassessment. *Communication Theory, 24*(4), 361–372. doi:10.1111/comt.12044

Wang, G. (Ed.). (2011). *De-Westernizing communication research: Altering questions and changing frameworks*. New York, NY: Routledge.

Wasserman, H. (2011). Mobile phones, popular media, and everyday African democracy: Transmissions and transgressions. *Popular Communication, 9*(2), 146–158. doi:10.1080/15405702.2011.562097

Weaver, D., & Drew, D. (2001). Voter learning and interest in the 2000 presidential election: Did the media matter? *Journalism & Mass Communication Quarterly, 78*(4), 787–798. doi:10.1177/107769900107800411

Weaver Lariscy, R., Tinkham, S. F., & Sweetser, K. D. (2011). Kids these days: Examining differences in political uses and gratifications, Internet political participation, political information efficacy, and cynicism on the basis of age. *American Behavioral Scientist, 55*, 749–764. doi:10.1177/0002764211398091

Young, C. S. L. (2014). Exploring patterns of Facebook usage, social capital, loneliness and well-being among a diverse South-African student sample. *Communicare, 33*(1), 57–72.

Zayani, M. (2012). Arab media studies: Between the legacy of a thin discipline and the promise of new cultural pathways. In T. Sabry (Ed.), *Arab cultural studies: Mapping the field* (pp. 55–78). London, UK: Tauris.