Second Screening for News and Digital Divides

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Abstract

Second screening is a relatively new set of media practices that arguably empower audiences to shape public narratives alongside news organizations and political elites. But in developing countries such as Colombia, it is important to examine who participates in this process, as substantial inequalities in both access to and use of information and communication technologies (ICTs) persist. This study examines how socioeconomic status (SES) relates to the adoption of second screening practices in Colombia, a country in which the technological access and literacy necessary to engage in these practices are becoming widespread but are not yet ubiquitous. Based on a random sample of face-to-face interviews, results show evidence of persistent digital divides in Colombia in terms of ICT access, ICT use, and second screening for news. Additionally, results indicate that the relationship between SES and second screening for news is indirect, mediated through technological access and public affairs engagement.

Second screening for news refers to a relatively new set of media practices in which individuals use a second device to further engage with television or online television news content (Gil de Zúñiga, García-Perdomo, & McGregor, 2015), and these practices arguably give audiences greater ability to shape public narratives alongside journalistic organizations and political elites (Anstead & O'Loughlin, 2011). But while these practices are rapidly spreading on a global scale, it is important to examine whether their adoption reflects digital divides based on access to or use of information and communication technologies (ICTs), especially in developing countries such as Colombia.

Access to ICTs has become ubiquitous in the developed world. In fact, countries such as (South) Korea and Denmark have achieved almost total penetration with more than 95% access

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to high-speed broadband. To some extent, the ubiquity of ICTs in the developed world has abated concerns about digital divides based on access to technology and has given rise to "second-level" concerns over divides in civic skills and specific uses of ICTs (e.g., DiMaggio, Hargittai, Celeste, & Shafer, 2004).

But in the developing world, inequalities in both ICT access and use persist (e.g., Hilbert, 2016). These gaps are particularly relevant when it comes to the adoption of emerging media practices that require access to multiple devices and civic skills to understand and participate in the creation of public narratives about ongoing social and political issues. Therefore, while second screening may empower audiences to participate in public conversations, important questions remain about who gets to participate in those conversations in developing countries such as Colombia.

While prior research has examined second screening practices in the context of the developing world and, more specifically, Latin America (e.g., McGregor, Mourao, Neto, Straubhaar, & Angeluei, 2017), it has not specifically examined second screening for news, as it relates to digital divides. The current study fills that gap in the literature by testing how socioeconomic status (SES) is related to the adoption of second screening for news in Colombia, a country that has seen a rapid increase in the size of the middle class in the last decade (World Bank, 2015). Based on a random sample of face-to-face interviews, the paper tests the expected relationships between SES and second screening while accounting for the mediating roles of technological access and use of the internet and social media for public affairs information.

Second Screening

Second screening is an emerging set of technologically enabled communication behaviors in which "individuals watching television use an additional electronic device, or 'screen' to access the internet or social networking sites to obtain more information about the program or event they are watching or to discuss it in real time" (Gil de Zúñiga et al., 2015, p. 795). According to this definition, second screening takes the form of two related but distinct behaviors, information seeking and discussion, and these behaviors may occur in tandem as individuals watch-mediated events in real time (Wohn & Na, 2011).

With a specific focus on second screening practices for news, one body of research centers on the idea that these practices help to reshape the relationships among news audiences, news media, and social institutions (e.g., Gillespie & O'Loughlin, 2015; Selva, 2015). Second screening for news affords users the ability to publicly criticize mass media and political elites (D'heer & Verdegem, 2015; Freelon & Karpf, 2015; Pond, 2016). To a certain extent, news organizations and political elites respond to this criticism by reshaping their content or talking points (Anstead & O'Loughlin, 2011, 2015; Chadwick, Dennis, & Smith, 2016), even though second screeners represent a vocal minority (Bentivegna & Marchetti, 2015) who generally respond to mass media content (Kim, Lee, & Park, 2016; Vergeer & Franses, 2016; Wells et al., 2016). Thus, scholars have described second screening for news as a complex interplay between media industries and audiences (Barry & Doherty, 2017; Moe, Poell, & van Dijck, 2016), and this interplay implies that second screening behaviors may be especially meaningful in terms of the influence those behaviors have on media and political organizations or institutions.

One prominent example of this complex interplay between news organizations and social media users is the contemporary televised political debate. It is increasingly common for people to scan Twitter for additional information or "live Tweet" during a political debate (Bentivegna & Marchetti, 2015; Freelon & Karpf, 2015; Pond, 2016; Vergeer & Franses, 2016; Wells et al., 2016). These interrelated practices enable debate viewers the ability to seek additional information about the debate and discuss it with other Twitter users in real time. They also allow users to offer commentary about the debate as it occurs and news coverage about the debate as it is produced. Ostensibly, both

news organizations and political strategists have the ability to react to this feedback in real time, reshaping content or talking points accordingly.

Another strand of literature suggests that second screening for news generally promotes political engagement. It is positively related to online political participation (Fitzgerald & Clarke, 2012; Gil de Zúñiga et al., 2015; Vaccari, Chadwick, & O'Loughlin, 2015), it provides alternative spaces for political discussion (D'heer & Courtois, 2016; D'heer & Verdegem, 2014; Iannelli & Giglietto, 2015), and it promotes online content creation (Freelon & Karpf, 2015; Giglietto & Selva, 2014). Additionally, second screening may enhance engagement with and enjoyment of news content (Auverset & Billings, 2016; Choi & Jung, 2016; Horning, 2017), and it may be influential in terms of helping people to form opinions about the event they are watching (Barnidge, Gil de Zúñiga, & Diehl, 2017). Thus, not only can second screening practices influence organizations and institutions, but they can also influence the individuals who engage in them. Second screening for news therefore provides new ways for people to engage with politics and public affairs, and it can also be influential in terms of shaping perception, opinion, and behavior.

Digital Divides in Developed Economies

ICT Access

Emerging from center-left social inclusion policy in the 1990s, the term "digital divides" became popular as a way to describe the gap between "information haves" and "information have-nots" within individual countries (Selwyn, 2004). One of the major themes of this public conversation is that the adoption of ICTs is regarded as a bellwether for the democratization of information, the empowerment of marginalized social groups, and the ability of citizens to bypass elite organizational structures to achieve meaningful political outcomes (e.g., Norris, 2001; Selwyn, 2004). Access to ICTs, these authors argue, enables a greater number of individuals to leverage communication networks for political, economic, or educational progress, forging a more inclusive society in the process.

Early research largely supported the idea that well-off individuals had more access to ICTs than less well-off individuals. In fact, the relationship between SES and ICT access became a relatively common finding across early digital divide studies (e.g., Ali, 1999; Gaziano, 1997; Hoffman & Novak, 1999; Katz & Apsden, 1997; Markus, 1987; Rice & Katz, 2003). Thus, these scholars concluded that ICT adoption is socially structured and that long-standing inequalities based on history, class, education, and economic opportunities are reproduced in the form of access divides whenever new technologies diffuse through a society. The result is a form of social exclusion, where older and poorer groups are most affected. Because the internet plays an increasingly important role in organizing the global economy, the lack of access can hinder a range of activities for low-SES groups, from job searches and health-care access to political engagement and learning opportunities (Ragnedda, 2017, p. 84).

But more recently, access to basic telecommunications services has become widespread in developed economies. To be sure, social inequalities in ICT access remain in these countries, especially between the young and old (Enoch & Soker, 2006; Harris, Staker, & Pollock, 2017; Livingstone & Helsper, 2007, 2010; Loges & Jung, 2001; North, Snyder, & Bulfin, 2008) and between suburban and other geographic areas (Van Dijk, 2005; Warren, 2007; Warschauer, 2004; Wei & Hindman, 2011). However, concerns about unequal access to ICTs have abated, to some extent, now that internet and mobile access has become almost ubiquitous in these contexts (Hilbert, 2014). According to webworldwide.io, 85.7% of people in the United States and 90.2% of Canadians now have high-speed broadband internet access (4 Mbps+), and these figures are even higher in the most "wired" countries in the world, including Denmark (95.7%) and (South) Korea (97%).

ICT Use

In response to diminishing inequalities in terms of access in developed economies, scholars began to investigate what they termed "second-level" digital divides that emphasized the ICT use rather than access (e.g., DiMaggio et al., 2004; Hargittai & Hinnant, 2008; Hilbert, 2014; López-Sintas, Filimon, & García-Álvarez, 2012; Van Deursen & Van Dijk, 2014; Van Dijk & Hacker, 2003; Wei, 2012; Yang & Grabe, 2011; Zillien & Hargittai, 2009). These scholars argue that while the access gap may have closed, high-SES individuals are more likely to possess civic skills and education, and that these skills-based inequalities manifest in differential patterns of ICT use for economic, community, and political engagement. For example, research shows that there is a relatively strong relationship between an individual's level of education and their likelihood to visit capital-enhancing websites such as news, politics, government, and consumer web pages (Hargittai & Hinnant, 2008; see also Hargittai, 2007). Additionally, higher levels of education are associated with ICT use for work and educational purposes such as word processing and looking for classes online (Van Dijk & Hacker, 2003; Van Deursen & Van Dijk, 2014). By contrast, lower-SES individuals are more likely to use ICTs for entertainment purposes (Hargittai & Hinnant, 2008; Van Deursen & Van Dijk, 2014).

A gap in the application and use preferences along SES lines is potentially problematic because news consumption and public affairs communications play important roles in helping people identify and act upon opportunities to participate in politics and community life, such as joining civic organizations, volunteering for a political campaign, or voting (Norris, 2000; Putnam, 2000). In addition, news consumption online is often regarded as an antecedent to other prodemocratic communicative behaviors, such as expressing political opinions, participating in online political forums, mobilizing others for political action, and developing social capital through network building and maintenance (Gil de Zúñiga, Jung, & Valenzuela, 2012; Rojas & Puig-i-Abril, 2009; Shah, Cho, Eveland, & Kwak, 2005; Velasquez & Rojas, 2017).

Digital Divides in Developing Economies and the Case of Colombia

In comparison to developed economies, gaps in terms of both ICT access and ICT use are wider in developing economies (Hilbert, 2016; Norris, 2001; Notten, Peter, Kraaykamp, & Valkenburg, 2009; Rojas & Puig-i-Abril, 2009; Tirado-Morueta, Mendoza-Zambrano, Aguaded-Gómez, & Marín-Gutiérrez, 2017). For example, Notten, Peter, Kraaykamp, and Valkenburg (2009) found that gaps in access to ICTs are larger in low-income countries than in high-income countries. Additionally, in a study of 172 countries, Hilbert (2016) found evidence of greater access and use divides in low-income countries than in high-income countries.

Additional evidence comes specifically from the Latin American context. For example, in a study of Colombia, Rojas and Puig-i-Abril (2009) found that both income and education are significant predictors of internet access and cellular phone ownership and that these variables are also significantly related to news use and blog use. Meanwhile, Tirado-Morueta, Mendoza-Zambrano, Aguaded-Gómez, and Marín-Gutiérrez (2017) found similar evidence of access and use divides in Ecuador. Taken together, these results suggest that while gaps in use may be more persistent than gaps in access in developed economies, both levels of the digital divide persist in developing countries, particularly in Latin America.

That said, internet and mobile adoption are on the rise in the developing world, generally, and in Latin America, specifically (International Telecommunication Union, 2016; Poushter, 2016). Latin America's internet penetration growth rate between 2012 and 2017 is one of the highest in the world (internetworldstats.com), and the historical gap between Latin America and the developed world has shrunk during that time span. Today, Central and South America claim approximately 10% of the

world's internet users, 10% of the world's mobile phone subscriptions, and 13% of the world's social media accounts (wearesocial.com). Colombia exemplifies these regional trends: From 2012 to 2015, the percentage of the population with a social media account increased from approximately 43% to 64% (Allin1Social, 2015; Colombia Reports, 2015).

However, despite this relatively rapid diffusion of technologies over the past five years, Colombia still lags behind the most connected countries in the world—approximately 70% of the Colombian population is online, as compared to approximately 86% of the U.S. population and 97% of the (South) Korean population. These two contextual factors—rapid growth on the one hand and a comparative lag on the other—make Colombia an ideal case to explore the digital divide as it relates to second screening, because the technological access and literacy necessary to engage in these practices are fast becoming widespread, but they are not yet ubiquitous.

Hypotheses

Several testable predictions can be derived based on the above literature, which establishes (a) the logic of digital divides in developing economies and (b) the continued importance of examining digital divides in developing economies. Based on these theoretical considerations, a process model of adopting second screening behaviors is developed in this section. First, early research on digital divides indicates that the ICT adoption is socially structured and that long-standing inequalities based on history, class, education, and economic opportunities will be reproduced in patterns of ICT access (e.g., Katz & Apsden, 1997; Markus, 1987). Individuals and groups with more economic and social resources will be more easily able to afford access to ICTs as they appear on the market. Moreover, empirical evidence suggests that these gaps in access persist in the developing world and in Latin America, specifically (Rojas & Puig-i-Abril, 2009; Tirado-Morueta et al., 2017). Therefore, we predict the following in the context of Colombia:

> **Hypothesis 1:** Individuals with high SES will have more access to ICTs than individuals with low SES.

Additionally, scholarship on gaps in ICT use suggests that high-SES individuals will possess the civic skills and education necessary to use ICTs to engage with news and public affairs (e.g., DiMaggio et al., 2004; Hargittai & Hinnant, 2008; Hilbert, 2014; Van Deursen & Van Dijk, 2014). The logic behind this hypothesis also suggests a direct effect of SES, such that it influences not only the affordability of ICTs but also the ways in which people use them. This use gap is also highly relevant in the context of Latin America (Rojas & Puig-i-Abril, 2009; Tirado-Morueta et al., 2017). Therefore, we predict that in Colombia, this logic will manifest in three different forms of public affairs engagement via ICTs: internet use for public affairs communication, social media use for public affairs communication, and second screening for news.

Prior research has distinguished between engagement with public affairs content on the internet and social media. The specific affordances of social media including the articulation of social networks (Barnidge, 2017; boyd & Ellison, 2007), the ease of social interaction (Gil de Zuniga, Molyneux, & Zheng, 2014), incidental exposure to news content (Brundidge, 2010), and the development of social capital differ (Ellison, Steinfield, & Lampe, 2007; Gil de Zúñiga, Barnidge, & Scherman, 2017). Additionally, scholarship on second screening has argued that these behaviors, while they largely take place on social media, are unique in that they require the use of multiple communication devices simultaneously (Gil de Zúñiga et al., 2015). Thus, we also distinguish between these various forms of engaging with public affairs content via ICTs, and we propose the following hypotheses in the context of Colombia:

Hypothesis 2: Individuals with high SES will use the internet for public affairs communications more than individuals with low SES.

Hypothesis 3: Individuals with high SES will use social media for public affairs communications more than individuals with low SES.

Hypothesis 4: Individuals with high SES will second screen for news more than individuals with low SES.

According to the logic of the use divide, the effects of SES on public affairs use are largely indirect and mediated through civic skills and resources. These civic skills are developed, in part, by habitual use of ICTs from youth (Enoch & Soker, 2006; Harris et al., 2017; Livingstone & Helsper, 2007, 2010; Loges & Jung, 2001; North et al., 2008). Therefore, it stands to reason that higher levels of access to ICTs will also manifest in increased public affairs use because having more access overtime helps individuals develop the civic skills necessary to engage with public affairs communications via ICTs. Therefore, we predict an indirect relationship between SES and the three forms of public affairs engagement, mediated through ICT access.

Hypothesis 5: The relationship between SES and second screening will be mediated by access to ICTs.

Hypothesis 6: The relationship between SES and second screening will be mediated by internet use for public affairs communications.

Hypothesis 7: The relationship between SES and second screening will be mediated by social media use for public affairs communications.

In addition to SES, age itself is an important factor to consider. While no formal hypotheses regarding age are presented because it is not a primary focus of the study, prior research shows that younger individuals are more likely to adopt ICTs (Enoch & Soker, 2006; Harris et al., 2017; Livingstone & Helsper, 2007, 2010; Loges & Jung, 2001; North et al., 2008) and to second screen for news (e.g., Barnidge et al., 2017). Therefore, ICT access and use may cut across socioeconomic strata among younger individuals who are more likely to adopt and use new media technologies regardless of their social or economic situation. Thus, age may act as an important counterbalance to SES.

Based on these predictions, we outline a process model for the adoption of second screening practices, which is illustrated in Figure 1. Two external background factors (age and SES) predict technological access, which in turn predicts engagement with public affairs on social media and other online venues. Finally, these three intervening variables (technological access, internet use for public affairs, and social media use for public affairs) are the proximal predictors of second screening and act as mediators for the indirect relationship between SES and second screening.

Method

Sample and Data

This study relies on survey data collected between June 28 and July 29, 2014, in 10 cities in Colombia as part of a biennial study of communication and political attitudes. The sample was designed to represent Colombia's adult urban population—76% of Colombia's 48.2 million inhabitants live in urban areas (Departamento Administrativo Nacional de Estadística (DANE), 2014 [National Administrative Department of Statistics]).

Respondents were selected using a multistage stratified random sampling procedure that selected households randomly based on city size and census data. Once the number of households was
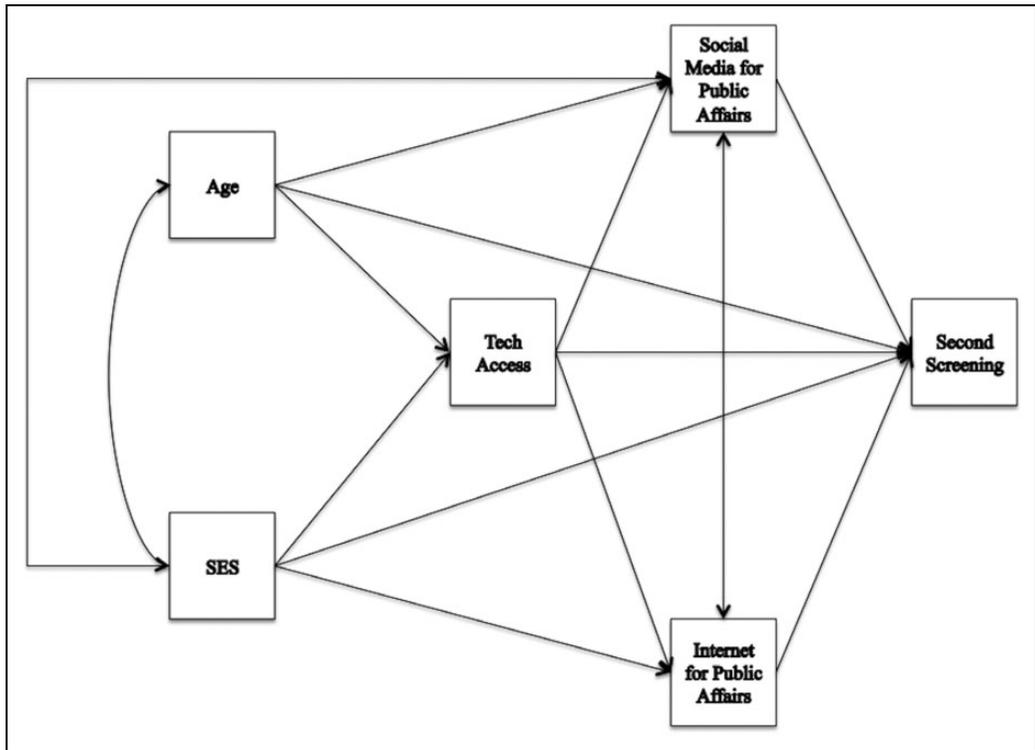
Figure 1. Theoretical model showing hypothesized relationships between exogenous and endogenous variables. SES = socioeconomic status.

allocated for a given city, a number of city blocks were selected randomly according to housing district and stratum. Then, individual households were randomly selected within each block. Finally, the study used the "adult in the household who most recently celebrated a birthday" technique to identify an individual respondent at random. Up to three visits to each household were made (if needed) to increase participation in the survey. A local professional polling firm, *Deproyectos Limitada*, collected the data and 1,102 face-to-face completed responses were obtained for a response rate of 55.5%. Removing missing cases listwise yielded 748 cases for analysis.

Endogenous Variables

Second screening. Based on previous research (Anstead & O'Loughlin, 2011; Choi & Jung, 2016), three six-point survey items (0 = *never*, 5 = *frequently*) were used to measure second screening. Questions asked respondents how often they (1) check what other people are saying online about the event that (they) are watching, (2) publish (their) own comments about something that (they) are watching, and (3) exchange text messages with people who are watching the same event but in a different place. These three items were averaged to create the final variable (Cronbach's $\alpha = .91$, $M = 1.02$, $SD = 1.42$). The variable was then logged to normalize the distribution ($M = .50$, $SD = .62$, min. $= 0.00$, max. $= 1.79$).

Social media use for public affairs. Engagement with public affairs content on social media has been shown to be an important antecedent of second screening (Gil de Zúñiga et al., 2015). Eight six-point survey items (0 = *never*, 5 = *frequently*) were used to measure social media use for public affairs.

Items asked respondents how frequently they (1) express (their) views about current issues on (a) Facebook and (b) Twitter, (2) share news stories with (their) contacts on (a) Facebook and (b) Twitter, (3) read news articles posted by (their) contacts on (a) Facebook and (b) Twitter, and (4) read the opinions of (their) contacts about political issues on (a) Facebook and (b) Twitter. These eight items were averaged (Cronbach's $\alpha = .91$, $M = .81$, $SD = 1.09$).

Internet use for public affairs. Likewise, engagement with public affairs content in other online spaces is an important antecedent of second screening (Gil de Zúñiga et al., 2015). The construct was measured with seven six-point items ($0 = never$, $5 = frequently$) asking respondents how frequently they use the internet to: (1) comment on current events and politics via e-mail, (2) discuss the news and opinion columns that appear in online media, (3) participate in online discussion forums, (4) express (their) opinion on social and political issues, (5) search for news information online, (6) seek government information, and (7) visit political blogs. These seven items were averaged (Cronbach's $\alpha = .89$, $M = .70$, $SD = .97$).

Technological access. According to prior literature, basic access to communication technology is necessary in order for people engage in emerging media practices, and more advanced access makes it more likely that people will engage in such practices (Livingstone & Helsper, 2010). Technological access was measured with four yes/no survey items that asked respondents whether (1) they have used the internet in the last 12 months, (2) whether their cell phone has data capabilities (respondents with no cell phones received a score of 0), (3) whether they are a member of online social networks such as Facebook, and (4) whether they use Twitter. Scores on these four items were added together (Cronbach's $\alpha = .76$, $M = 1.52$, $SD = 1.41$).

Exogenous Variables

SES. According to research on digital divides, SES could be an important predictor of second screening (DiMaggio et al., 2004; Hargittai & Hinnant, 2008). Three survey items were used to measure SES. Education was measured on an eight-point scale ($0 = none$, $7 = postgraduate\ degree$), annual household income was measured on a nine-point scale ($0 = less\ than\ CP500,000$, $8 = more\ than\ CP10,000,000$), and household energy stratum—which is a proxy measure of the respondent's household energy consumption (e.g., of a similar approach to proxy measures of SES; see, e.g., Oakes & Rossi, 2003; Somi et al., 2008)—was measured on a six-point scale (min. = 0, max. = 5). These three items were standardized and then averaged (Cronbach's $\alpha = .74$. $M = 3.09$, $SD = 1.11$). A binary variable was created using median split (median = 3), high SES = 56%, $SE = .50$.

Age. Prior research shows that younger people are more likely to second screen (Barnidge et al., 2017), and therefore age was measured with a single survey item ($M = 42.85$, $SD = 16.81$).

Control Variables

Gender. Gender was measured with a single survey item (female = 55%, $SE = .50$).

Race. Race was also measured with a single survey item ($2 = White$, $1 = mestizo/mixed\ race$, $0 = Black\ Caribbean/Indigenous/other$). Reflecting the national population of Colombia, the average respondent is mestizo/mixed race ($M = 1.19$, $SD = .57$).

Political interest. Three survey items were used to measure political interest ($0 = not\ at\ all$, $5 = a\ lot$). Items asked respondents how much interest they have in (1) local or regional politics, (2) national

politics, (3) and international politics. These items were averaged (Cronbach's α = .92, M = 1.91, SD = 1.47).

Political efficacy. Three survey items were also used to measure political efficacy (0 = *strongly disagree*, 5 = *strongly agree*). Items asked respondents how much they agree or disagree with the following statements: (1) people like me can influence what the local government does, (2) I believe that the national government cares about what people like me think, and (3) city government responds to the initiatives of individuals. These items were averaged (Cronbach's α = .80, M = 1.74, SD = 1.29).

Ideological extremity. Respondents were asked to place their political ideologies on a left-right scale (0 = *liberal*, 5 = *neutral*, 10 = *conservative*). The scale was folded, so that high scores indicate extreme ideologies on either side (M = 1.50, SD = 1.68).

News use. News use was measured with five six-point survey items (0 = *never*, 5 = *frequency*). Items asked respondents how often they read, watch, or listen to (1) national daily newspapers, (2) national news magazines (e.g., Semana), (3) national television news, (4) online news, and (5) social media news. These items were averaged (Cronbach's α = .68, M = 1.83, SD = 1.02).

Political talk network size. Respondents were asked how many family members, close friends, neighbors, and acquaintances with whom they talk politics. These items were added together (Cronbach's α = .75, M = 10.17, SD = 15.58).

Political talk frequency. Respondents were also asked how often (0 = *never*, 5 = *often*) they talk politics with each type of person named above (Cronbach's α = .86, M = 1.65, SD = 1.37).

Political talk diversity. Finally, respondents were asked how often they talk politics with people who (1) have very different ideas from (their) own, (b) are from a different social stratum than (them), and (c) are a very different age then (them). These items were averaged (Cronbach's α = .87, M = 2.09, SD = 1.59).

Analysis

The analysis was conducted in three phases. First, independent samples t tests were used to assess the mean differences between high- and low-SES groups in technological access, internet use for public affairs communication, social media use for public affairs communication, and second screening. Then, the endogenous and exogenous variables were residualized on the control variables, and path analysis was conducted in the structural equation modeling framework. Finally, mediation tests were conducted to assess the indirect relationships between SES and second screening.

Results

The results show evidence of digital divides in Colombia in terms of both access to and use of ICTs. Significant differences between high- and low-SES groups were detected for all four endogenous variables in expected directions. Independent samples t tests were conducted using the binary SES variable to assess mean differences, and results show that the high-SES group was more likely than the low-SES group to have access to ICTs, to use the internet for public affairs communication, to use social media for public affairs communication, and to second screen. These results, which generally support Hypothesis 1 to Hypothesis 4, are summarized in Table 1 and visualized in Figure 2.

Table 1. Mean Comparisons and Test Statistics for ICT Access and Use Variables.

Variable	High SES	Low-SES	*t* Value (*df*)
Technological access	1.98	.97	−12.56*** (1,056.20)
Internet use for public affairs	1.01	.32	−12.65*** (990.34)
Social media use for public affairs	1.12	.46	−10.47*** (1,006.00)
Second screening for news	0.63	.31	−8.20*** (857.57)

Note. Cell entries are group means and test statistics from independent samples *t* tests. ICT = information and communication technologies. SES = socioeconomic status.
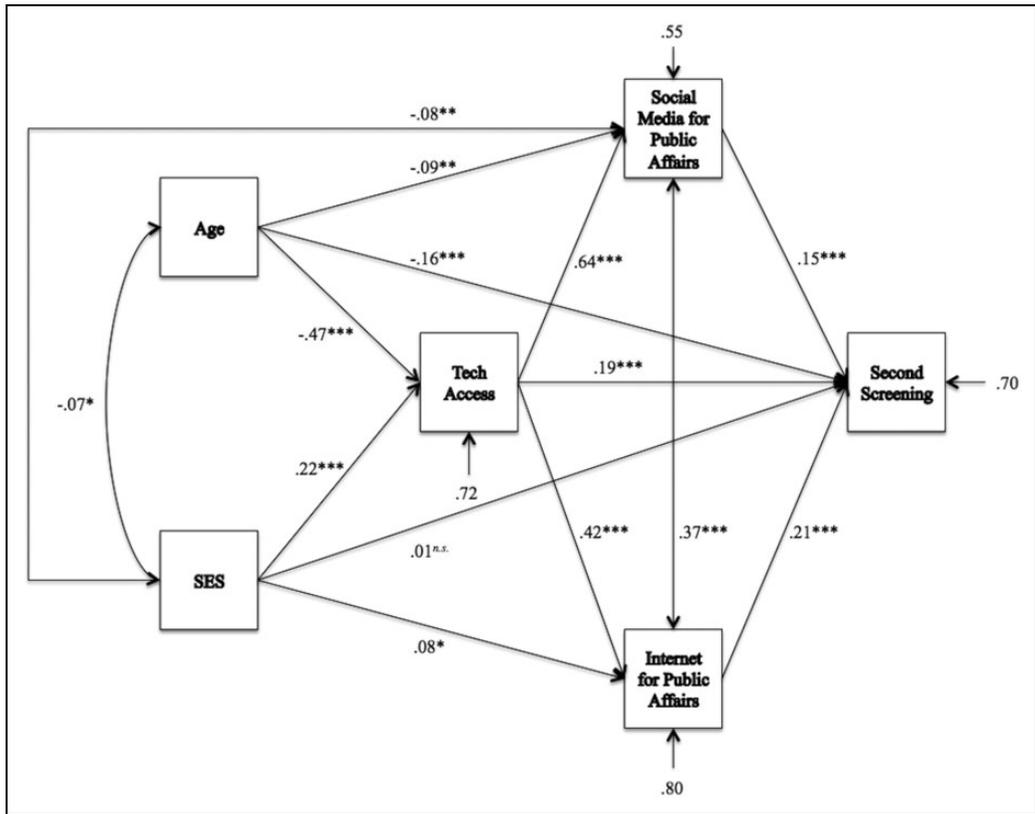***p < .001.
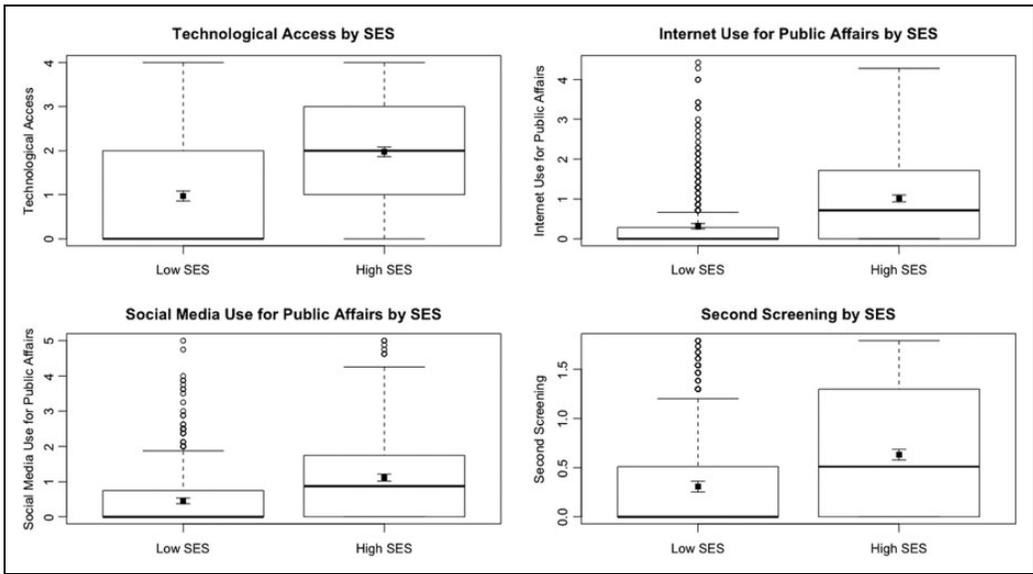
Figure 2. Mean difference in exogenous variables by socioeconomic status. Box plots show the median (bold horizontal line), upper and lower quartiles (top and bottom of the box), along with the extremes (extended horizontal lines) and outliers (individual dots).

Results also indicate that SES is indirectly related to second screening. Path analysis was conducted using the correlation matrix in Table 2, and standardized results are summarized in Figure 3. The model fits the data well, $\chi^2(1) = 2.37 = 8$, confirmatory fit index (CFI) = .99, goodness-of-fit index (GFI) = .99, root mean square error of approximation (RMSEA) = .04, $p = .43$, standard root mean square residual (SRMR) = .01, and its explanatory value is relatively high (R^2 second screening = .30). While SES is not directly related to second screening ($\gamma = .01, p = .865$), it is positively related to all intervening variables including technological access ($\gamma = .22, p < .001$), engagement with public affairs on the internet ($\gamma = .08, p = .012$), and engagement with public affairs on social media ($\gamma = -.08, p = .004$). All of these intervening variables are directly related to second screening (for technological access, $\beta = .20, p < .001$; for internet for public affairs, $\beta = .21, p < .001$; for social media for public affairs, $\beta = .15, p = .001$). Technological access is also positively related to both engagement variables ($\beta = .42, p < .001$ for internet and $\beta = .64, p < .001$ for social media).

Finally, results suggest that the indirect relationship between SES and second screening is mediated through technological access and engagement with public affairs content online and via social media.

Figure 3. Standardized results from path analysis. $N = 748$. $*p < .05$, $**p < .01$, $***p < .001$. $\chi^2(1) = 2.38$, $p = .30$, confirmatory fit index (CFI) = .99, goodness-of-fit index (GFI) = .99, root mean square error of approximation (RMSEA) = .04, $p = .43$, standard root mean square residual (SRMR) = .01. The dependent variable is logged. All variables have been residualized on the controls: gender, race, political interest, political efficacy, ideological extremity, news use, political talk network size, political talk frequency, and political talk diversity. SES = socioeconomic status.

Table 2. Correlation Matrix Used in Path Analysis.

Variable	(1)	(2)	(3)	(4)	(5)	(6)
(1) Second screening for news	1.00	—	—	—	—	—
(2) Social media for public affairs	.45	1.00	—	—	—	—
(3) Internet for public affairs	.41	.53	1.00	—	—	—
(4) Technological access	.46	.66	.44	1.00	—	—
(5) Socioeconomic status	.12	.09	.19	.26	1.00	—
(6) Age	−.37	−.40	−.25	−.49	−.07	1.00

Note. $N = 748$. Cell entries are Pearson's correlation coefficients. Second screening is logged. All variables have been residualized on the controls: gender, race, political interest, political efficacy, ideological extremity, news use, political talk network size, political talk frequency, and political talk diversity.

Mediation tests were conducted to formally test the indirect relationships between SES and second screening. Results, which support Hypothesis 5–Hypothesis 7, are reported in Table 3. Bootstrapped indirect effects are estimated for technological access at .06 ($SE = .01$, $p < .001$), for internet use for

Table 3. Indirect Effects of Socioeconomic Status on Second Screening for News.

Variable	Sobel	Aroian	Goodman	Bootstrap B	Bootstrap SE
Technological access	6.41***	6.39***	6.42***	.06***	.01
Internet use for public affairs	4.84***	4.83***	4.86***	.04***	.01
Social media use for public affairs	2.44*	2.43*	2.45*	.02**	.01

Note. $N = 748$. Direct effect $= .01$, $SE = .01$, $p = .747$. Total effect $= .13$, $SE = .02$, $p < .001$. 1,000 bootstrap iterations. The dependent variable is logged. All variables have been residualized on the controls: gender, race, political interest, political efficacy, ideological extremity, news use, political talk network size, political talk frequency, and political talk diversity.
*$p < .05$. **$p < .01$. ***$p < .001$.

public affairs at .04 ($SE = .01$, $p < .001$), and for social media use for public affairs at .02 ($SE = .01$, $p <$ .001). Combined with a direct effect of .01 ($SE = .01$), the model therefore estimates a total effect of SES at .11 ($SE = .02$). Thus, respondents score 4% higher on the second screening measure (range = 2.89) for every 1 standard deviation increase in SES, and this change is facilitated by technological access and engagement with public affairs content.

Discussion

This study finds evidence of substantial digital divides in Colombia, both in terms of ICT access and use. Specifically, it finds gaps in the adoption of second screening behaviors, and SES is a significant factor in creating these gaps via its indirect relationship with ICT use for public affairs communications. These conclusions relate to several important discussion points.

First, these findings highlight the role of digital divides in reinforcing social inequality in Colombia, which is in the process of democratization in the wake of more than 40 years of political and drug-related conflict (Rojas, Barnidge, & Puig-i-Abril, 2016). Despite the fact that a vibrant sphere of political communication has emerged online in which Colombian political and social leaders seek to engage with citizens in order to reinvigorate democratic institutions, Colombia has recently witnessed various scandals involving corruption in government contracts, human rights violations, and illegal monitoring of opposition parties (Rodriguez & Seligson, 2008). In as much as second screening for news gives ordinary citizens the ability to pushback against this corruption by reshaping public narratives about important social and political issues (e.g., Anstead & O'Loughlin, 2011), the ability to do so may be limited to high-SES individuals. Thus, the problem of including those from lower-SES backgrounds in these processes of democratization is a fundamental challenge to Colombian democracy. And while this study has focused on digital inequalities in urban areas, where most Colombians live, the country's Indigenous and Black populations may pose the biggest challenges to political inclusion, as these groups generally live in underdeveloped, coastal areas with low levels of access to basic education and communication infrastructure (Telles & Paschel, 2014). Therefore, while this study highlights social inequalities embedded in Colombia's *mestizo* population, further research is needed on these Black and Indigenous groups to fully investigate digital inequalities in that country.

Second, the results of this study may not be generalizable to other national contexts. However, they are perhaps more representative of developing economies than they are of developed economies. These results also speak to the general state of democratization in Latin America, more broadly. Democracy in Latin America has a checkered past, and at times, it has been undermined by the residual legacy of colonialism, foreign intervention by the United States, and corruption at the highest levels of social and political institutions (e.g., Karl, 1990). Second screening for news may provide citizens in Latin America with a new tool to influence these institutions and to counteract political corruption in order to reshape their societies (Anstead & O'Loughlin, 2011). However, it is

important to recognize that not all citizens of Latin America are currently participating in these processes, and this recognition should be a primary consideration for public policy both at the national and international levels. Specifically, policies that promote the expansion of telecommunications infrastructure and civic education—processes that are already underway—may enhance democracy in Latin America.

Third, and more generally, these findings highlight the continuing importance of studying digital divides in the developing world. While ubiquitous access to ICTs may have obviated the need to assess digital access divides in more developed countries (e.g., Poushter, 2016), these divides persist in Colombia and other developing nations despite recent trends toward growing internet access (e.g., Hilbert, 2016), particularly in Latin America (wearesocial.com). In fact, as access to online technologies reaches different social groups at different rates, these divides may exacerbate existing social cleavages, hindering the inclusivity of emerging democracies in the developing world (Norris, 2001). Continuing to investigate these trends, as the adoption of technology becomes more ubiquitous is of primary importance to those interested in the health of democracy in Latin America and elsewhere in the developing world.

Finally, the findings also imply that emerging media practices such as second screening may exacerbate information inequalities, especially in developing world contexts. Second screening for news may be a "weapon of the strong" (Barnidge et al., 2017). That is, the individuals who engage in second screening practices are often the individuals who are already in the best position to take advantage of their democratically beneficial outcomes including discursive engagement (e.g., D'heer & Verdegem, 2015), political content creation (e.g., Giglietto & Selva, 2014), social and community empowerment (e.g., McGregor et al., 2017), and political participation (e.g., Vaccari et al., 2015).

Several important limitations must be noted. First, the design of this research is cross-sectional, and therefore it cannot be used to make causal inferences. Although the process model developed herein is theoretically and empirically grounded in prior research, future research should employ an overtime design to be able to make causal claims about second screening and digital divides. A second set of limitations relates to the measurement strategy. Although all measurement scales reach acceptable levels of reliability, measurement of online behaviors and technological access are based on metaconcepts that combine several more specific concepts. We made this decision intentionally, trading a degree of conceptual precision for conceptual parsimony. However, future studies may prioritize precision over parsimony and opt to disaggregate some of the measures constructed in this study. Another limitation relates to certain findings that run counter to the literature. Specifically, the negative relationship between SES and social media use for public affairs goes against the study's (informal) expectations based on prior research on digital divides. Further research is needed to clarify this relationship in multiple national contexts. A final limitation stems from the analysis. While the goal of this study was to examine a specific process of technological adoption and engagement in emerging online behaviors, there are certainly more variables (many of which were controlled) that could play an important role in predicting who second screens and who does not, and future research may opt to focus on examining these variables.

Despite these limitations, this study has provided relatively strong evidence of digital divides in Colombia both in terms of ICT access and use. Furthermore, SES has a direct influence on second screening for news, mediated through technological access and public affairs engagement. Thus, substantial socioeconomic divides in the adoption of second screening behaviors have developed in Colombia, potentially limiting the democratic impact of these emerging media practices in that context.

Declaration of Conflicting Interests

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