Human Communication Research ISSN 0360-3989

ORIGINAL ARTICLE

Perceptions of Social Media for Politics: Testing the Slacktivism Hypothesis

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Americans' views of political activity on social media range from exuberant to exasperated. But do perceptions of social media actually influence citizens' online and offline political behaviors as suggested by the so-called "Slacktivism hypothesis?" In the present study, we undertake a more careful examination of this question by testing a theoretical model in which perceiving participation on social media as an easy or impactful means of engaging in politics encourages political expression on social media, which in turn increases offline political participation. Using panel survey data collected during the 2016 U.S. presidential election, we show that positive perceptions of social media indirectly increase offline political participation, through the influence of political expression on social media. However, we find no such positive indirect effects for those with politically diverse networks or for younger people. Implications for reconceptualizing the relationship between perceptions of social media and political participation are discussed.

Keywords: Perceptions, Political Participation, Social Media, Age, Network Heterogeneity, Slacktivism, Political Expression, Spillover.

doi:10.1093/hcr/hqx008

Introduction

With generational shifts in civic norms and a proliferation of new opportunities to participate in the democratic process, scholars have often expressed optimism about the role social media can play in political life (e.g., Lee, Choi, Kim, & Kim, 2014; Xenos, Vromen, & Loader, 2014). Research has largely demonstrated a positive relationship between social media use and offline political participation (Boulianne, 2015) and identified ways in which social media facilitate a new style of personalized, expressive citizenship (Bennett, Wells, & Freelon, 2011). However, communication scholars have long expressed concern over how media use can lead citizens down a path to discord, disengagement and apathy (Lazarsfeld & Merton, 1948). From this perspective, the adoption of new communication technology can pose a threat to existing modes of political participation.

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The American public seems to hold quite diverse views on social media as a new space for politics. A 2016 Pew Research survey found that many respondents view political talk on social media as frustrating, divisive and something to be avoided (Duggan & Smith, 2016). At the same time, other respondents in the same survey held positive perceptions of political discourse on social media and relied on social networking sites (SNS) as platforms for expressing their political views. The varying perceptions of social media as contexts for political engagement reflect research showing both benefits and dangers inherent in the rapid migration of political information, discourse and participation online (Gil de Zúñiga, Jung, & Valenzuela, 2012; Sunstein, 2009). However, it remains unclear whether people's prior perceptions of social media as spaces for politics affect their actual political engagement on social media and subsequently shape their offline political participation.

Researchers have long considered how perceptions influence the adoption of new communication technology (Rogers, 1962) and how using such technology may lead to disengagement in politics (Lazarsfeld & Merton, 1948). Yet little work has examined how these two theoretical processes work in concert with one another, raising a key theoretical question: can positive perceptions of the expressive potential of a political communication technology in one domain influence political behavior in another? This is a particularly important possibility, given the persistence of the so-called "Slacktivism hypothesis," which posits that engaging in low-threshold acts of political participation online will decrease willingness to engage in more effortful action offline (Morozov, 2012).

This article attempts a more careful examination of the relationship between perceptions of social media as contexts for politics and both online and offline political behavior. We propose and test a theoretical model which hypothesizes that perceiving social media as impactful or easy ways to engage in politics will be associated with greater political expression on social media, which in turn will *promote* traditional forms of offline political participation (Figure 1). We further examine whether or not this pathway depends on contextual factors (e.g., the diversity of political views in one's social network) or individual factors (e.g., age). These moderators are important to explore because, despite holding positive perceptions of social media, users may be unwilling to express themselves on social networks populated by those with differing political views out of fear that talking politics in such settings feels unproductive or difficult (Eliasoph, 1998). Similarly, younger people may avoid political expression, given their generation's lower levels of political interest (Moy, Manosevitch, Stamm, & Dunsmore, 2005) and general uncertainty about the process and consequences of political talk on social media (Thorson, 2013).

Our study adds to previous research in at least three ways. First, we use diffusion of innovations theory (DIT) to explain how individuals might adopt social media for political expression if they perceive that: (a) doing so is impactful, or (b) that social media are easy to use. This provides a framework for understanding how users' perceptions of social media influence expressive behaviors on SNS. Second, we show that using media for expressive purposes rather than consumptive purposes results in different behavioral

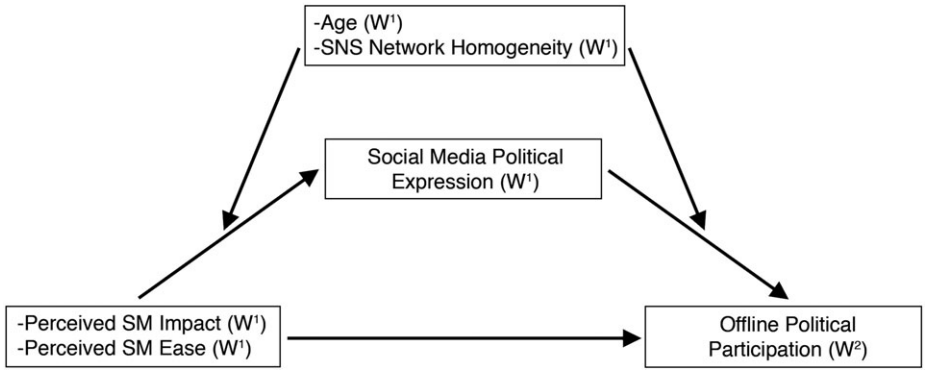

Figure 1 Theoretical model.

effects. This distinction problematizes the contemporary notion of Slacktivism as well as older theories, which predict that media consumption will lead to disengagement (e.g., Lazarsfeld & Merton, 1948). In doing so, we help explain the largely positive relationship between social media use and offline political participation found in the literature (Boulianne, 2015). Third, we highlight the important role that contextual and individual factors play in the translation of online political expression to offline political action. By testing network homogeneity and age as moderators, we are better able to predict how and for whom our model matters in the real world.

The Slacktivism hypothesis

Why might our perceptions of social media for politics shape our willingness to engage in political action? The public discourse around this question has often centered on the narrative of Slacktivism (e.g., Morozov, 2012). "Slacktivists" choose to click on links or share content, naïvely believing that their political expression has a substantive impact on real world political outcomes (e.g., Yarnall & Marks, 2014). Proponents of the Slacktivist narrative argue that those who perceive social media as easy means of having an impact on politics are likely to dismiss offline political participation entirely (e.g., Robertson, 2014).

As we have noted, the concern over the negative influence of media consumption on political engagement dates back to early media effects research. Lazarsfeld and Merton (1948) warned of the "narcotizing dysfunction" of the mass media, in which increased media consumption leads to a withdrawal from civic and political life. Despite the emergence of Slacktivism as the newest iteration of this long-standing fear, there is ample evidence that low-threshold political participation on social media can "spill-over" into higher-threshold offline engagement (Boulianne, 2015; Lane & Dal Cin, 2017; Vaccari et al., 2015). Ultimately, perceiving social media use as an impactful or easy way to engage in politics may influence offline political behavior, but not in the way that the Slacktivism hypothesis suggests.

In this study, we give more systematic consideration to the Slacktivism hypothesis by empirically testing whether or not positive perceptions of political engagement on social media indeed affect individuals' willingness to engage in politics offline. Rather than assuming that favorable perceptions of social media somehow directly discourage traditional political participation, we argue that beliefs about social media are far more relevant to how social media are adopted as *technology* (Rogers, 1962). Accordingly, we unpack the Slacktivism hypothesis by first examining the extent to which individual perceptions encourage expression in the increasingly politically-important context of social media (Bennett et al., 2011; Boulianne, 2015). In the following section, we review literature that examines how political expression on social media is influenced by the perception that political activity on SNS is: (a) impactful, and (b) easy.

Perceptions of political participation on social media

While the perceptions of ease and impact are often interwoven in accounts of Slacktivism (e.g., Robertson, 2014), research suggests that these two perceptions may exert independent influence over people's use of social media for political expression. DIT has been widely used to explain the process through which new technologies are adopted (Ma, Lee, & Goh, 2014; Rogers, 1962), and is particularly useful for its parsimony in theorizing the effects of different types of perceptions. The DIT literature suggests that both perceptions of impact and ease may increase the likelihood of technological adoption, but through very different psychological routes. One goal of this study is to disentangle these two types of perceptions and test their effects independently. Accordingly, we use DIT framework to explain how perceptions of ease and impact might be uniquely important for the adoption of social media as technologies for political expression.

Perceptions of impact

Rogers (1962) argues that technologies are more quickly adopted when their impact is *observable*. If the results of an innovation are visible, people are more likely to discuss its merits and become convinced of its usefulness (Rogers, 1962). Empirical evidence across several domains supports Rogers' contention that observable technologies are more rapidly adopted (e.g., Denis, Hébert, Langley, Lozeau, & Trottier, 2002; Makse & Volden, 2011). Expression on social media is, by design, highly visible. Not only can users observe the political expression of others, but they can also use social signals (e.g., likes, shares, comments) to directly assess their impact on those in their network (boyd & Ellison, 2007). DIT would predict that those who perceive that social media can have an impact on politics are more likely to adopt the technology for their own political expression.

Closely related to the concept of observability of impact is political efficacy, a more global sense of one's ability to play a meaningful role in the political process (Balch, 1974). Psychological research suggests that individuals make judgments

about the efficacy of their actions based on observations of their social environment (see Bandura, 1982). Studies show that political expression on the internet can be predicted by an individuals' level of technological efficacy (Hoffman & Schechter, 2016; also see Correa, 2010; Eastin & LaRose, 2000 for discussion of the impact of self-efficacy on online behaviors). Similarly, there is initial evidence that individuals who view expression on social media as an effective means of participating in politics are more likely to post and comment on political content, while those who observe negative interactions involving political talk on social media refrain from expressing their political views altogether (Duggan & Smith, 2016).

Theories of democratic deliberation also stress that successful deliberation depends upon the shared end-goal of reaching a solution to political or social problems (Habermas, 1989). Embedded in this conceptualization of deliberation is the understanding that citizens want their political conversations to have an impact on the realities of political life (Delli Carpini, Cook, & Jacobs, 2004). When individuals are uncertain whether their political views will be received constructively within a certain context, they are less likely to share their opinions (Eliasoph, 1998; Thorson, 2013). However, when a specific context is perceived as conducive to constructive political talk, citizens may feel that their contributions will be impactful and be willing to express themselves. Based on the reviewed literature we hypothesize the following:

> **H1a**: The perception that using social media for politics is impactful (W1) will be positively associated with using social media for political expression (W1).

Perceptions of ease

The degree to which technologies are easy to use is another key characteristic of diffusion of innovations. Rogers (1962) conceptualizes ease of use as *complexity*, how difficult a given technology is to understand or use. Research has shown that complex technologies are adopted at a much slower rate, while simpler technologies are easier for individuals to quickly put to use (e.g., Denis et al., 2002; Makse & Volden, 2011). Complexity is particularly important for communication technologies, which are often intended for wide adoption by the public, but vary in their ease of use (Davis, 1989; Nysveen, Pedersen, & Thorbjørnsen, 2005). The relative ease of using specific affordances of SNS, such as posting, sharing, and commenting, may ultimately make online participation less effortful. Borrero, Yousafzai, Javed, and Page (2014) found that for some users, perceiving expression on social media as less effortful increased their intention to do so. In light of this, we argue that if people perceive political involvement on social media to be easy, they should be more likely to express themselves politically on SNS.

This proposition is well supported by the technology acceptance model (TAM), which indicates that perceptions of technology use, particularly in terms of ease of use, are important antecedents that drive actual use of technology (Davis, 1989; Nysveen et al., 2005). When applying this model to the context of

social media, researchers have found that the perceived ease of using social media can encourage actual use of social media (Rauniar, Rawski, Yang, & Johnson, 2014). As people become more comfortable using a new media technology, they tend to experience more benefits from using that technology (Campbell & Kwak, 2010). We therefore expect that those who perceive using social media as an easy way to participate in politics will be more likely to use SNS to express themselves politically:

> **H1b**: The perception that using social media for politics is easy (W1) will be positively associated with using social media for political expression (W1).

Political expression on social media and offline political participation

If individuals ultimately do engage in political expression on social media, will they become Slacktivists? Lazarsfeld and Merton (1948) argued that mass media serve a "narcotizing dysfunction" by leading citizens to mistake the consumption of information with meaningful engagement in politics. While this argument appears, at face value, to nicely capture the contemporary phenomenon of Slacktivism, applying the concept of narcotizing dysfunction to explain the effects of political expression on social media is problematic on theoretical grounds. First, the focus of Lazarsfeld and Merton's concern was the act of *consumption*, which they believed would lead individuals to "mistake *knowing* about problems of the day for *doing* something about them" (p. 23). Unlike traditional one-to-many mediums (e.g., newspapers, television), social media are many-to-many mediums that allows users to *express* themselves. We argue that expression likely has very different consequences than consumption. Second, social media are fundamentally different from other mass media in the degree to which user behavior is shaped by relationships within social networks. As we will discuss later, the diversity of political views in one's social media network and one's sensitivity to political difference have important implications for the role of expression in models of political behavior.

These theoretical distinctions might help explain why there is not widespread empirical evidence of Slacktivism. Some studies have found that engagement in low-threshold participation (e.g., signing an online petition) can decrease willingness to engage in high-threshold participation (e.g., volunteering for an organization) (Kristofferson, White, & Peloza, 2014). However, an abundance of research has challenged the notion of "Slacktivism" and instead shown that political expression online and on social media can encourage offline participation (Boulianne, 2015; Lane & Dal Cin, 2017; Vaccari et al., 2015; Yamamoto, Kushin, & Dalisay, 2015).

Why might political expression on social media lead people to become more engaged offline? Through the process of composing and posting messages, individuals are more likely to pay close attention to and learn from information they have received, elaborate on and justify their position, and establish a greater level of commitment to their ideas (Pingree, 2007). Such expression moves people from

political observers to participants, which may give them confidence and tools that are carried over into offline political contexts (Gil de Zúñiga, Molyneux, & Zheng, 2014). By expressing themselves online, individuals build interest, come to think more about and relate to politics, and are more likely to see themselves as political, thus strengthening some core skills needed to subsequently participate offline (Kim & Kim, 2008; Vaccari et al., 2015; Yamamoto et al., 2015). Accordingly, political expression on social media is often considered a precursor to and facilitator of offline political participation (Rojas & Puig-i-Abril, 2009). As a result, we expect that political expression on social media should encourage, rather than dampen, offline involvement:

> **H2**: Using social media for political expression (W1) will be positively associated with offline political participation (W2).

Thus far, we have proposed links between perceptions of social media and political expression on social media and between political expression on social media and offline political participation. Putting these arguments together, we predict that these links should result in a positive indirect effect of perceptions of social media on offline participation (Figure 1):

> **H3**: Perceptions that using social media for politics is impactful or easy (W1) will have positive, indirect effects on offline political participation (W2) through the influence of political expression on social media (W1).

The moderating influence of SNS network homogeneity and age

Given the mediation model outlined above, we now turn to the possibility that the proposed indirect effects might be stronger or weaker depending on contextual and individual factors. The causes and consequences of expressing political views on social media are crucially influenced by both the balance of political views in one's network as well as the way different cohorts approach political expression. Specifically, we examine the possibility that our model is moderated by both the homogeneity of political views present in users' online social networks and their age (see Figure 1).

Network homogeneity as a moderator

The partisan composition of one's network has been a central factor in investigating political outcomes in the context of interpersonal and mobile communication (Campbell & Kwak, 2011; Lee, Kwak, & Campbell, 2015; Mutz, 2002a, 2002b), and more recently, in the context of social media (Choi & Lee, 2015; Lee et al., 2014). Given that the homogeneity of social networks is likely to determine the political experiences that individuals can have on social media—for example, the content of political viewpoints that individuals are exposed to—it is important to consider network homogeneity in analyses involving social media use and political outcomes.

The first link in our model between positive perceptions of social media and political expression on social media may be stronger among individuals with more politically homogeneous social networks. Those surrounded mostly by others with similar political ideas to their own will likely see reinforcing ideas exchanged in a constructive and respectful manner on social media and are less likely to have the unpleasant experience of encountering political fights or rants on social media (Vraga, Thorson, Kligler-Vilenchik, & Gee, 2015). Accordingly, those with positive perceptions of social media may be further encouraged to express themselves if they know their expression will be well received within a network of like-minded others.

The second link between political expression on social media and offline political participation may also be stronger among people with high levels of network homogeneity. When these people express themselves politically on social networks comprised of like-minded individuals, they are more likely to receive positive, supportive and reinforcing feedback (Gil de Zúñiga et al., 2014; Pingree, 2007). Users with homogenous social networks will rarely be challenged by individuals with political views dissimilar to their own (Mutz, 2006; Nir, 2011). Accordingly, such users may become more certain about, and committed to, their political positions and grow confident that they can be a part of the larger political process (Vaccari et al., 2015). Therefore, it is possible that individuals with more homogeneous social networks will demonstrate a stronger indirect relationship between positive perceptions of social media and offline political participation:

> **H4**: The positive indirect effects of perceptions of social media for politics (W1) on offline political participation (W2), through the influence of political expression on social media (W1), will be stronger for individuals with more homogenous SNS networks.

Age as a moderator

Research has consistently shown that age plays a significant role in understanding *whose* political activity is most likely to be affected by political media use, and has demonstrated that age adds helpful nuance to models of online/offline political engagement (Kwak, Campbell, Choi, & Bae, 2011; Xenos et al., 2014). Similarly, we argue that the relationships in our model should be *weaker* for younger people. Investigation of this possibility is supported by journalists' frequent focus on young people as the group most likely to engage in Slacktivism (e.g., Robertson, 2014), as well as research demonstrating that young people may approach political expression on SNS with a greater sensitivity to political disagreement (Thorson, 2013) and find traditional offline participation less meaningful (Bennett et al., 2011).

Young people are often among the earliest adopters of new communication technology (Kennedy & Funk, 2016) and accordingly, age is used as a moderator in various studies of technological adoption (e.g., Straub, 2009). However, because of their heightened aversion to political disagreement, enthusiasm for social media among young people may not necessarily lead to political expression. Research

shows that some young people refrain from political expression on social media altogether for fear of engaging in conflict in an important social environment (Thorson, 2013). Accordingly, young social media users adopt complicated social norms governing when it is acceptable to talk politics (Vraga et al., 2015), which may inhibit their own expression. This evidence suggests that positive perceptions of social media may not lead to political expression for younger people in the same way they do for older people.

Similarly, there is reason to suspect that young people may experience a weaker "spill-over" effect from expression on social media into participation offline. Younger people are less likely than older people to adhere to models of citizenship that value offline participation and instead may feel that their self-expression is "meaningful" enough (Bennett et al., 2011). Previous studies support this, demonstrating that the effects of online political media use on political participation grows with age (Gil de Zúñiga et al., 2012; Kwak et al., 2011; Vaccari et al., 2015). Given the reviewed literature, we argue that the indirect relationship between positive perceptions of social media and offline political participation will be weaker for younger people:

> **H5**: The positive indirect effects of perceptions of social media for politics (W1) on offline political participation (W2), through the influence of political expression on social media (W1), will be weaker for younger individuals.

Method

Sample

The data for this study were collected using a two-wave national online survey. Respondents from the United States were recruited by the survey research company YouGov. To ensure a nationally representative pool of respondents, YouGov recruits through online advertising and strategic partnerships with a wide range of websites. The sub-sample for our study was drawn from YouGov's larger pool of adult respondents, using a matching technique, which reflects the population in terms of age, gender and other demographic characteristics. Wave 1 (W1) of the survey was conducted in late September 2016, during the general campaign period of the 2016 US presidential election. This first wave had a 29% response rate, with 1,800 respondents completing the survey out of 6,213 individuals who were invited to participate. This response rate is far above those reported by major research organizations during the same period (Duggan & Smith, 2016). Invitations to participate in wave 2 (W2) were sent to all W1 respondents in late October, 2016 during the last six days of the general campaign prior to election day. In all, 1,293 respondents completed the survey, resulting in a 72% retention rate. Any respondents who failed an attention-check question were removed, leaving 1,056 valid responses.[1] Because our study concerns perceptions and behaviors specific to social media, we further limit the analyses and descriptive statistics reported below to

respondents who reported using SNS that are frequently used for political purposes (Duggan & Smith, 2016), including Facebook, Twitter, Snapchat or Instagram during W1 ($N = 902$, 85.42%).

The final sample demographic profile resembles figures reported in the US Census Bureau's 2015 American Community Survey (ACS) for variables including median age of individuals under 18 (ACS = 45–54 years, W1 = 49), percentage of females (ACS = 51.4%, W1 = 58%), median household income (ACS = $53,889, W1 = $50,000–$59,000) and median educational attainment for those 25 or older (ACS = some college, W1 = some college).

Measures

Perceptions of political participation on social media and offline

To assess perceptions of political participation in various contexts we asked respondents to rate their agreement with four statements using a seven-point scale ranging from 1 = definitely disagree to 7 = definitely agree. The first item measured the perception that "expressing political views on social media has a significant impact on politics" and was recoded into *perceived social media (SM) impact* (W1; $M = 3.52$, $SD = 1.64$). The second item measured the perception that "participating in politics on social media takes a lot of effort," which was reverse coded into *perceived SM ease* (W1; $M = 4.85$, $SD = 1.62$). The final two items used similar wording to assess perceptions that offline participation has an impact (*perceived offline impact* W1; $M = 4.22$, $SD = 1.58$) and is easy (*perceived offline ease* W1; $M = 3.30$, $SD = 1.57$). Social media perception items were used as independent variables in our analyses, while offline perception items were used to control for respondents' general perceptions of political participation as impactful or easy.

Social media political expression

In order to capture political expression on social media, we asked how frequently respondents performed behaviors on four platforms frequently used for such purposes in our data set (Facebook: 5 items, Twitter: 7 items, Snapchat: 1 item and Instagram: 1 item). Respondents reported the frequency of platform specific behaviors on six-point scale ranging from 1 = never to 6 = every day in the past 30 days. These items included behaviors such as "sharing," "liking," and "tweeting" political content on specific platforms. Items were combined to form four platform specific indexes (αs = .91–.96). The platform specific indexes were then combined to create an overall index of *SM political expression* (W1; $M = 1.41$, $SD = .56$).

Offline political participation

To assess the criterion variable of offline political participation, we used eight items asking respondents how frequently they performed a range of offline political activities including: (a) attended a public hearing, town hall meeting, or city council meeting, (b) called or mailed a public official or politician, (c) physically posted or distributed a political sign, banner, button or bumper sticker, (d) attended a political event for a candidate, (e) participated in a political demonstration or protest,

(f) volunteered for a political campaign, (g) signed a petition about a political issue, topic or candidate; and (h) donated money to a political party, candidate or political action committee in-person or by mail. Respondents were given these measures in both W1 and W2 using the same six-point scale as previous frequency measures, but changing the reference window from "the past 30 days" (W1) to "the past 14 days" (W2). This change was necessary in order to ensure that there was no overlap in the reference window between waves. All eight measures were combined into indices for offline political participation (one for each wave). *Offline political participation (W2)* was used as the dependent variable ($M = 1.20$, $SD = .44$, $\alpha = .81$), while *offline political participation (W1)* was used to control for baseline offline political participation ($M = 1.26$, $SD = .5$, $\alpha = .83$).

Age

Significant differences have been observed in the way different age groups engage in politics, particularly in online contexts (e.g., Bennett & Segerberg, 2012). *Age* was measured by asking respondents in which year they were born ($M = 47.46$ years, $SD = 16.06$ years).

SNS network homogeneity

Previous research suggests that the political diversity of social networks can influence processes of political communication and participation (e.g., Lee et al., 2015; Mutz, 2002a). Given the difficulty of accurately self-reporting network characteristics across multiple platforms, we asked respondents about the social networking site they used the most frequently. Two items, using a 5-point scale ranging from 1 = none to 5 = all, asked how many individuals on the site respondents use the most, "share the same views on social issues or politics" and "support the same presidential candidate." These two items were combined as an index of *SNS network homogeneity* ($M = 2.92$, $SD = 1.02$, $r = .81$).

Control variables

We also include a number of control variables in our analyses, which are theoretically relevant to the dependent, independent or mediating variables. To account for the possibility that respondents' social media political expression might be reflective of more general social media use, we control for the frequency of *SM for relational use* by asking respondents how frequently in the past 30 days they used social media to "stay in touch with family and friends." This item was measured on the same six-point frequency scale as previous measures (W1; $M = 4.25$, $SD = 1.73$). Research suggests that political expression on social media can also be shaped by levels of political interest and traditional political news consumption (Hasell & Weeks, 2016). We control for *political interest* ($M = 5.04$, $SD = 1.82$) by asking respondents their agreement with the statement; "I am very interested in politics," on a 7-point scale ranging from 1 = definitely disagree to 7 = definitely agree. Traditional media use was assessed with items asking how often in the past seven days respondents used a range of news sources, including national nightly news, cable news, local television

news, daily newspapers and online news sites. Responses to each item were measured on a 5-point scale, ranging from 1 = never to 5 = everyday, and then combined as an index of *traditional media use* ($M = 2.16$; $SD = .98$; Cronbach $\alpha = .61$). Finally, *gender* and *education* were included as demographic control variables.

Analysis

To strengthen our test of the causal link between social media perceptions and offline political participation through social media political expression, we used panel data to control for W1 levels of offline political participation. This allowed us to effectively assess the change in offline political participation (Eveland & Thomson, 2006). For social media perceptions and social media political expression we used W1 variables. Perceptions that *offline* participation is impactful or easy were included in all analyses to control for general attitudes towards political participation and to allow us to analyze the perceptions unique to social media. We also controlled for W1 levels of political interest, SM relational use, traditional media use, SNS network homogeneity, age, gender and education in all analyses.

Determining appropriate α level

Throughout this study we use a pre-determined α level of .05 as our criterion for statistical significance. In acknowledgement of the growing call for researchers to better justify their chosen level of statistical significance (see O'Keefe, 2007), we examined extant literature for estimates of anticipated effect sizes and conducted power analyses to determine our achieved power at alternative α levels. Because we could find no meta-analytic evidence suggesting an anticipated effect size for the specific relationships in our model, we used Cohen's (1992) guideline for small ($f^2 = .02$), medium ($f^2 = .15$) and large ($f^2 = .35$) main effect sizes. Because our model also includes interactive effects, which are likely to be far smaller that main effects (Aguinis, Beaty, Boik, & Pierce, 2005), we used a different guideline for expected interactive effects in our model. We selected small, medium and large interactive effect sizes that correspond to 25th ($f^2 = .0004$), 50th ($f^2 = .002$), and 75th ($f^2 = .0053$) percentiles of effects sizes observed by Aguinis et al. (2005) in their 30-year review of moderation effect sizes.

Using the above effect sizes, a desired power level ($1 - \beta$) of .80 (Cohen, 1992), and our sample size ($N = 902$), we computed achieved power for both the canonical α level of .05 as well as a stricter α level of .01. Results from power analyses conducted using the statistical program G*Power 3.1 are reported in Table 1. We find that acceptable power to detect small, medium and large main effects is achieved at both α levels. However, achieved power falls below .80 for all sizes of interactive effects at both α levels. This is not entirely surprising given that interactive effects are typically much smaller than main effects (Aguinis et al., 2005) and that tests for interactive effects are notoriously under-powered (Brookes et al., 2004). Accordingly, we chose to use $\alpha = .05$, in order to retain the maximum power to detect interaction effects, while noting that even using this α level leaves us underpowered.

Table 1 Power Analyses

	Achieved power when α = .05	Achieved power when α = .01
Main Effect—Small (f^2 = .02)[1]	.98	.95
Main Effect—Medium (f^2 = .15)[1]	1.00	1.00
Main Effect—Large (f^2 = .35)[1]	1.00	1.00
Interactive Effect—Small (f^2 = .0004)[2]	.09	.02
Interactive Effect—Medium (f^2 = .002)[2]	.27	.11
Interactive Effect—Large (f^2 = .0053)[2]	.58	.34

Notes: All calculations based on $N = 902$.
[1]f^2 from Cohen (1992); uses 13 as the number of predictors.
[2]from Aguinis et al. (2005); uses 14 as the number of predictors.

Results

Tests of simple mediation

To test our proposed theoretical model (Figure 1), we first examined the potential mediating role of SM political expression by testing two regression models and then calculating indirect effects using the SPSS macro PROCESS.[2] The first regression tested the relationship between perceptions of social media and SM political expression (H1a and H1b; Table 2, first column). We found that both perceived SM impact, $b = .06$ (.01), $p < .001$, and perceived SM ease, $b = .04$ (.01), $p < .001$, are positively associated with SM political expression (W1) after entering all control variables. This indicates that the more that respondents perceive political participation on social media as impactful or easy, the more likely they are to engage in political expression on social media. The second regression model tested the relationship between SM political expression (W1) and offline political participation (W2), while controlling for W1 levels of participation and other control variables (H2; Table 2, second column). The two social media perception variables were also entered into the model in order to test for mediation. We found that SM political expression is positively related to offline political participation (W2), $b = .11$ (.02), $p < .001$, indicating that engaging in more political expression on social media leads to an increase in political participation offline. We found no significant direct relationship between perceived SM impact and offline political participation, $b = .001$ (.01), $p = .89$, or perceived SM ease, $b = .01$ (.01), $p = .40$.

To formally test SM political expression as a mediator of the relationship between perceptions of social media and offline political participation, we used model 4 of the SPSS macro PROCESS, which employs ordinary least squares path analyses (Hayes, 2013). This allowed us to test the unstandardized indirect effect of each predictor by computing 10,000 bootstrapping samples and bias corrected 95% confidence intervals (CI). PROCESS used the same regression models shown in Table 2 as a basis for testing all models. First, we computed the indirect effect

Table 2 Regressions for Mediation Analyses

	Dependent Variables	
	SM Political Expression (W^1) (Mediator) *b* (SE)	Offline Political Participation (W^2) (Criterion) *b* (SE)
SM Political Expression (W^1)	-	.11 (.02)***
Perceived SM Impact (W^1)	.06 (.01)***	.001 (.01)
Perceived SM Ease (W^1)	.04 (.01)***	.01 (.01)
Age	−.003 (.001)***	.002 (.001)***
Gender (Male = 1, Female = 2)	−.04 (.03)	.02 (.02)
Education	.004 (.01)	.02 (.01)*
Political Interest (W^1)	.05 (.01)***	.01 (.01)
SM for relational use (W^1)	.09 (.01)***	−.01 (.01)*
Traditional Media Use (W^1)	.03 (.02)#	−.02 (.01)
SNS Network Homogeneity (W^1)	.06 (.02)***	.01 (.01)
Perceived Offline Impact (W^1)	−.03 (.01)**	−.01 (.01)
Perceived Offline Ease (W^1)	−.02 (.01)	.003 (.01)
Offline Political Participation (W^1)	.42 (.03)***	.53 (.03)***
Constant	.003 (.12)	.21 (.09)*
Adjusted R^2	.39	.48
Residual Std. Error	.44 (df = 889)	.32 (df = 888)
F Statistic	49.34*** (df = 12; 889)	64.98*** (df = 13; 888)

Note: Unstandardized coefficients reported. Standard errors in parentheses.
# $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$, (two-tailed). $N = 902$. In model predicting SM Political Expression (W^1) ΔR^2 for Perceived SM Impact (W^1) = .023, ΔR^2 for Perceived SM Ease (W^1) = .009 (all *p*s < .001). In model predicting Offline Political Participation (W^2) ΔR^2 for SM Political Expression (W^1) = .012 ($p < .001$).

for a mediation model specifying perceived SM impact as the predictor. We found a significant indirect effect of perceived SM impact (W1) on offline political participation (W2) through SM political expression (W1), with a point estimate of .007 (.003), 95% CI [.0021, .0153] (CI entirely above zero). Next, we tested a model specifying perceived SM ease (W1) as the predictor and found a similar indirect effect of .004 (.002), 95% CI [.0010 to .0101] (CI entirely above zero). This indicates that holding perceptions that social media is impactful or easy ultimately increases offline political participation by encouraging respondents to express themselves politically on social media (H3). While both perceptions were fully mediated by SM political expression, the indirect effect observed for the perception that social media has an impact was nearly double that of the indirect effect observed for the perception that social media is easy.

Tests of moderated mediation

Finally, we addressed the question of whether or not the mediated effects observed vary based on respondents' age or the homogeneity of their social networks. To do so, we conducted moderated mediation analyses for each social media perception using PROCESS model number 58, which tests the indirect effect of a given predictor at different levels of either age or SNS network homogeneity. Model 58 tests one moderator at a time while controlling for the other moderator and produces interaction terms for both paths in the model (see Figure 1). Accordingly, the coefficients reported below come from models that are identical, except for the variables that are specified as the predictor and moderator.

When SM impact was specified as the predictor, we found that the relationship between perceived SM impact (W1) and SM political expression (W1) is significantly moderated by SNS network homogeneity, $b = .02$ (.01), $p = .04$, but not significantly moderated by age, $b = .0005$ (.001), $p = .36$. The relationship between SM political expression (W1) and offline political participation (W2) is moderated by both SNS network homogeneity $b = .06$ (.02), $p = .01$ and age, $b = .003$ (.001), $p = .04$.

The results summarized above suggest that the indirect effect of perceiving social media as impactful on offline political participation through social media political expression, may vary depending on an individual's age and the political diversity of their social media networks (H4 and H5). To further probe these interactions and determine their influence on the mediated effect of social media political expression, we employed the pick-a-point approach recommended by Hayes (2013), in which values of each moderator are specified and indirect effects are computed at those levels. This allowed us to determine indirect effects at different levels of age and SNS network homogeneity. Results show that indirect effects increase as individuals' networks become more homogeneous, with no significant indirect effects for those with comparatively diverse networks (at values below 2.9 on a 5-point scale). Indirect effects also increase as individuals get older, with no significant indirect effects for individuals 31 years or younger. Figures 2 and 3 plot approximate point estimates and 95% CI across levels of the moderators and include precise point estimates in the notes.[3]

We took a similar approach to analyzing models with perceived SM ease as the predictor. We found that the relationship between perceived SM ease (W1) and SM political expression (W1) is not significantly moderated by SNS network homogeneity, $b = .01$ (.01), $p = .37$ or age, $b = .001$ (.001), $p = .11$. The relationship between SM political expression (W1) and offline political participation (W2) is moderated by both SNS network homogeneity, $b = .06$ (.02), $p < .01$ and age, $b = .003$ (.001), $p = .04$.

This suggests that the indirect effect of perceiving social media as easy on offline political participation may vary depending on an individual's age and SNS network composition (H4 and H5). We again plotted indirect effects and 95% CI at

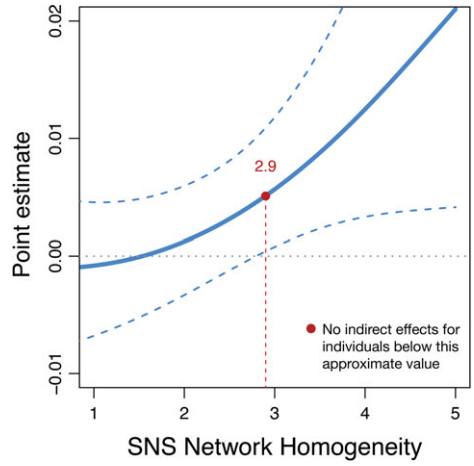

Figure 2 Conditional Indirect Effects of Perceived SM Impact (W^1) on Offline Political Participation (W^2) through SM Political Expression (W^1) at Values of SNS Network Homogeneity.
Note: Lines represent trends. Precise point estimate (*PE*) and 95% CI at levels of SNS Network Homogeneity[3]: **1.90 (−1 SD)**, *PE* = .0009, CI [−.0037 to .0068], **2.92 (Mean)**, *PE* = .0052, CI [.0009 to .0118], **3.94 (+1 SD)**, *PE* = .0119, CI [.0037 to .0273].

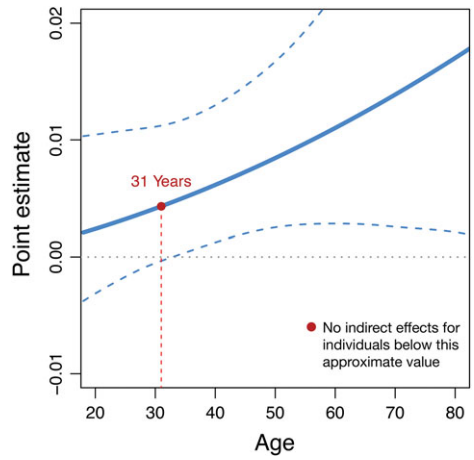

Figure 3 Conditional Indirect Effects of Perceived SM Impact (W^1) on Offline Political Participation (W^2) through SM Political Expression (W^1) at Values of Age.
Note: Lines represent trends. Precise point estimate (*PE*) and 95% CI at levels of age[3]: **31.40 (−1 SD)**, *PE* = .0044, CI [.0001 to .0123], **47.67 (Mean)**, *PE* = .0078, CI [.0027 to .0169], **63.52 (+ 1SD)**, *PE* = .0120, CI [.0034 to .0267].

levels of the moderators, with precise point estimates as a note (Figures 4 and 5). Indirect effects increase as individuals' networks become more homogeneous, with no significant indirect effects for those with comparatively diverse networks (at values below 2.6 on a 5-point scale). Indirect effects also increase as individuals get older, with no significant indirect effects for individuals 36 years or younger.

Discussion

This study examines the narrative popularized by the Slacktivism hypothesis: positive perceptions of political participation on social media can lead individuals down the road to political disengagement. In the construction of our theoretical model, we engaged two well-established theoretical frameworks, the narcotizing dysfunction of the media thesis (Lazarsfeld & Merton, 1948) and DIT (Rogers, 1962). On the one hand, our findings confirm that ease and impact, the attractive features of social media highlighted by the Slacktivism hypothesis, are indeed associated with political expression on social media. These results are reflective of the characteristics of innovation (observability and complexity) that DIT predicts will lead to technological adoption (Rogers, 1962).

However, we do not find support for the notion that those who express themselves online become Slacktivists, as implied by the concept of narcotizing dysfunction (Lazarsfeld & Merton, 1948). To the contrary, and consistent with prior literature (e.g., Boulianne, 2015), we find that those who engage in low-threshold acts of political expression on social media are more likely to subsequently take

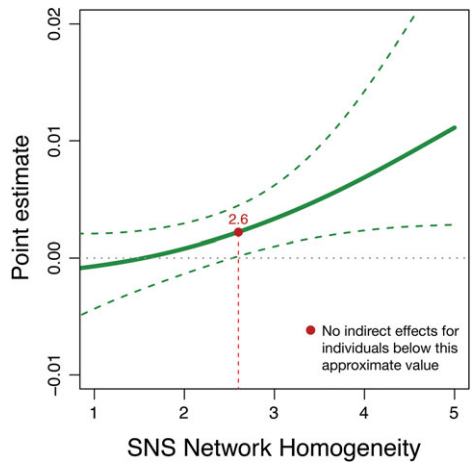

Figure 4 Conditional Indirect Effects of Perceived SM Ease (W^1) on Offline Political Participation (W^2) through SM Political Expression (W^1) at Values of SNS Network Homogeneity.

Note: Lines represent trends. Precise point estimate (*PE*) and 95% CI at levels of SNS Network Homogeneity[iii]: **1.90 (−1 SD)**, *PE* = .0006, CI [−.0026 to .0044], **2.92 (Mean)**, *PE* = .0031, CI [.0005 to .0080], **3.94 (+1 SD)**, *PE* = .0066, CI [.0016 to .0182].

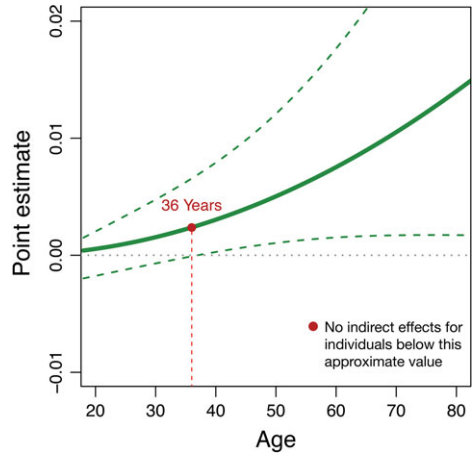

Figure 5 Conditional Indirect Effects of Perceived SM Ease (W^1) on Offline Political Participation (W^2) through SM Political Expression (W^1) at Values of Age.
Note: Lines represent trends. Precise point estimate (*PE*) and 95% CI at levels of age[iii]: **31.40 (−1 SD)**, *PE* = .0017, CI [−.0002 to .0068], **47.67 (Mean)**, *PE* = .0045, CI [.0013 to .0108], **63.52 (+ 1SD)**, *PE* = .0085, CI [.0023 to .0208].

part in higher-threshold offline political activity. By formally testing social media political expression as a mediator, we confirm that perceiving social media as easy or impactful modes of political engagement indirectly encourages offline political participation. In this sense, our results support the contention that political expression may not have the same "narcotizing" effects as political information consumption, despite what previous theory might predict.

Our results also show that the benefits of perceiving the political world of social media positively are not uniform for everyone. The indirect effects we observe are non-existent for those with politically diverse networks and for younger people, suggesting that political expression may be too risky an endeavor in some contexts or for some cohorts. This highlights the reality that political difference may play a key role in shaping political expression on social media.

For users with homogenous social networks, positive expectations of political discourse on social media are likely to be reaffirmed and strengthened. This finding is in line with prior literature on network diversity in the context of interpersonal and mobile communication, in that political discussion in networks of like-minded contacts can lead to greater certainty of political views and increased willingness to participate in politics (Campbell & Kwak, 2011; Mutz, 2002a). Those surrounded by people who hold similar political views on social media can express themselves without risking damage to social relationships (Mutz, 2006). In contexts where political talk is largely supportive or constructive, expression may feel like a more meaningful and gratifying political act. Positive reactions to acts of expression may further galvanize users to take part in more effortful offline action.

Although it is encouraging to find that people in like-minded social networks participate more after expressing themselves on social media, it is also possible that such individuals miss out on important opportunities to deliberate with others who hold opposing viewpoints (Kim & Pasek, 2016; Mutz, 2002b). Users with highly homogenous social networks may participate in partisan politics within online echo chambers, without sufficiently weighing the diversity of opinions available in American society. Given the historical importance of deliberation in the democratic process, more empirical work needs to be conducted to investigate the implications of network homogeneity for political deliberation and participation in our model.

Similarly, we find that young people's positive perceptions of social media are not likely to translate into offline action. On the one hand, we find that positive perceptions of social media are related to increased engagement in political expression regardless of one's age. This provides further evidence that despite the "Slacktivism" narrative's focus on young people (e.g., Morozov, 2012), perceiving social media as impactful or easy encourages individuals of *all ages* to express their political views on SNS. However, we find that only middle-aged and older people benefit from a potential "spill-over" effect between online expression and offline activity. Younger people's positive perceptions of social media make them more likely to express themselves on social media, but not more likely to engage in offline political participation.

One possible explanation for why our model largely does not benefit young people lies in the difference between generational styles of citizenship (Bennett et al., 2011). For older people, who are likely to practice "dutiful citizenship," attending political rallies or public hearings are behaviors that are valued as good citizenship. Yet, young people may adopt the norms of "actualizing citizenship," and for them, political expression on social media may in and of itself be a way to satisfy citizenship goals. It is important to note that we do not observe a *negative* effect of expression on participation as the narcotizing dysfunction or Slacktivism accounts would predict, but rather find no evidence to suggest that political expression on social media is influencing young people's offline participation.

Our study indicates that both perceptions of impact and ease can indirectly shape offline behavior. While the Slacktivist narrative has often combined these two perceptions, our intention was to measure and analyze them separately as suggested by DIT. Some scholars have emphasized the *effort* (difficulty) involved in traditional forms of participation as a key factor in declining civic engagement (Putnam, 2001), however we find that the perception of *impact* has the strongest effect on offline political participation. This suggests the relative importance of individuals' perception that their political behavior will have a substantive impact. While we do not specifically test the interaction between perceptions of impact and ease, future work should examine the interplay between different perceptions of social media.

On a related note, the similarity in the direction of the effects of the two social media perceptions in our model does necessitate considering whether they are simply measuring the same latent construct. In order to examine the discriminant validity of our two perception measures, we performed post-hoc regression analyses of their

antecedents. Results, which are summarized in supplementary Appendix A, first show that perceived SM impact and perceived SM ease are negatively correlated ($r = -.36$). The cross-sectional regression models, which predict each perception variable while controlling for the other, demonstrate that the two perceptions have a unique set of predictors. While both perceptions are more likely among younger people and those with higher political interest, perceived SM impact is more likely among women, those who are less educated, those who have higher levels of political self-efficacy, and those who engage in more frequent offline political participation. Perceived SM ease is more likely among those who use social media more frequently for relational purposes. These findings suggest that perceptions of ease and impact are indeed distinct, however future research is needed to continue to investigate the unique roles that they may play in influencing political behavior on social media. In addition, future research should go beyond our single-item measures to strengthen the reliability and validity of the perception concepts we examine.

The panel data used in this study strengthen our causal claims by effectively controlling for changes in offline political participation over time.[4] Despite this strength, our study is limited in several ways. First, as with all survey research, we must rely on individuals to accurately report their own behavior. While we have no reason to believe our self-report measures would lead to systematically biased reporting, future research should examine behavioral data to better capture what individuals do on social media. This may be particularly helpful in assessments of political diversity within online networks. Our conclusions are also qualified by the modest effect sizes we observe, which may be related to the number of control variables in our model and the general level of political disengagement in America at present. Nevertheless, such effects promise to have a significant impact at the population level.

Conclusion

This article contributes to the literature by advancing a model that helps explain how positive perceptions of a political communication technology in one domain influence political behavior in another. While our study is one of the first to examine this dynamic in the context of social media, it is important to note that our findings echo previous work on the decline of traditional forms of civic engagement over the past half-century. Putnam (2001) suggests that increased use of electronic media, such as television, was a contributing factor to Americans' withdrawal from traditional civic life over the past half-century. We could imagine a similar dynamic emerging as social media mature as venues for politics, in which perceptions of the digital political sphere not only influence what people do on social media, but also exert crucial influence over whether or not traditional forms of participation endure or continue to disappear. However, we demonstrate here that, paradoxically, the future of older forms of participation may depend on positive perceptions of new forms of participation. Our finding that young people and those with politically diverse networks do not benefit from such positive perceptions, highlights the fragility of such emerging pathways to increased democratic participation.

Ultimately, our theoretical model poses an interesting question for those who wish to engage more people in the political process. If perceiving political action on social media as impactful or easy indeed promotes political participation, can such perceptions be cultivated? Existing efforts to engage individuals in politics have often focused on the responsibilities and benefits associated with traditional forms of political participation (e.g., Putnam, 2001). Given the challenging nature of directly motivating individuals to vote or attend a political rally, might it be more beneficial to focus on promoting social media as a low-threshold gateway to engagement? By making political participation on social media appear impactful or easy, more people may be drawn into politics and encouraged by their experiences with political expression to participate the old-fashioned way.

Supporting Information

Additional supporting information may be found in the online version of this article: Table S1. Summary of Regression Analyses for Social Media Participation Perceptions

Notes

1 Participants who failed the attention check were not significantly different from the remaining participants in their level of political interest, $t(1107) = -2.97$, $p = .70$.
2 All analyses were conducted again with participants who failed the attention check included. The results are comparable to what we report here with small differences in effect sizes and one change in level of significance (the indirect effect of SM Impact on offline political participation is non-significant at the mean level).
3 All plot lines drawn by computing indirect effects using the R package "mediation," with 1,000 simulations for discrete values of the moderator. Lines were then smoothed using interpolation and plotted. Precise indirect effects are unstandardized point estimates generated using PROCESS and based on 10,000 bootstrapping samples with 95% biased corrected CIs. All control variables included in each model. $N = 902$.
4 Our lagged dependent variable model allows us to help clarify previous research on the relationship between social media and offline political participation, which has largely relied on cross-sectional data to draw conclusions (Boulianne, 2015). There is ongoing discussion about the strengths and weaknesses of the lagged dependent variable model we used. Some scholars caution that controlling for autoregressive terms might generate biased coefficient estimates (e.g., Achen, 2000). Yet, we believe that the lagged dependent variable model remains a good choice, because in the context of elections, past political behaviors matter for future political behaviors (see Keele & Kelly, 2005). We also controlled for potential confounders in our model (Finkel, 1995), ranging from demographic to political and media use-related variables.

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