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Facebook and the global dimensions of protest participation in France, Canada, the United States, and the United Kingdom

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ABSTRACT

Many contemporary protests highlight global issues. These protests emerge as a method to influence global politics in the absence of formal structures for citizens to voice their concerns to global political leaders. Prior research establishes that political efficacy, political discussion, and political interest are important predictors of protest participation, but this body of research has not addressed the global dimensions of these variables. Using survey data from 2019 in four countries (USA, UK, France, and Canada), we examine the extent to which perceived influence on international leaders, political discussion of global affairs, and interest in global issues influence protest participation, accounting for the traditional framing of these variables in terms of national politics. We find that all variables correlate with protest participation. We also find that civic uses of Facebook increase the likelihood of protesting. Furthermore, the correlations of these variables with protest participation are consistent across the four countries. In sum, we offer a robust model predicting protest participation considering contemporary global dynamics.

Keywords: protest; Facebook; political efficacy; political interest; political discussion; cross-national

Word count (excluding Appendix): 8,174

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In 2019, climate strikes occurred in more than 150 countries (Weston 2019). Social media were critical for organizing and documenting these events (Boulianne et al. 2020b), mobilizing youth (Boulianne and Ohme 2022) as well as supporting an international dialogue about climate change (Chen et al. 2022). These protest events are global, but the existing scholarship on protest participation tends to focus on the local or national processes explaining the rise of protest events.

We shed light on the global connections that contribute to participation in protests, after accounting for the national processes of mobilization. We examine the role of Facebook in increasing global connections that lead to protest activity using four-country, nationally representative survey data (the United States, United Kingdom, France, and Canada) gathered in 2019. Overall, we note that countries differ with respect to their global connections (efficacy, discussion, interest), particularly respondents from France who report lower average levels of interest and discussion of global affairs. Respondents from France are also distinctive in terms of a greater likelihood of participating in protests. Despite these differences in behaviors, the correlations of these variables (political efficacy, discussion, interest, Facebook use) with protest participation are consistent across the four countries.

We demonstrate that protest participation is positively correlated with the discussion of global affairs and perceptions about influencing international leaders but not related to interest in international political issues. These relationships are consistent across all four countries, suggesting a model that is robust across these four Western democracies. Civic uses of Facebook have a direct impact on protest participation, but also moderate the role of global efficacy on protest. These findings have important implications for understanding the motivation to participate in contemporary protest events in Western democracies.

Global Connections and Protest Participation

In the existing research, protest participation is treated as either a localized event or an activity that intends to influence national politics (e.g., marches in Washington, DC). Protest participation is a distinct form of political activity in that it is not directly attached to the state, which results in its framing as a non-institutionalized form of participation (Theocharis and van Deth 2018). This form of participation is also distinctive in its visibility (vs. the private act of voting), which can elevate the risks related to participation but also increase media coverage of these events. Indeed, media coverage of protests can document global expressions of discontent (Chen et al. 2022).

The last two decades have seen a shift in social movements from local protests to global political events where the lines between local and international intertwine (Baek 2018; Boulianne et al. 2020b; Tarrow 2005). New media technologies with global outreach have nurtured new forms of social connections, enabling individuals to expand their local social networks to virtual communities in which individuals can share their interests or grievances (Baek 2018; Bennett 2005; Boulianne et al. 2020a; Earl et al. 2015). In this new environment, an individual's civic and political actions are no longer limited to their immediate vicinity with the aim to support local interests; on the contrary, they focus on global solidarity by targeting international concerns (Baek 2018; Bennett 2005; Earl et al. 2015).

One instance is the global climate strike (Boulianne et al. 2020b). Climate change is a "global issue" that must be addressed through multilateral cooperation. A series of protests took place before and after the United Nations Climate Summit, calling for measures to tackle global warming (Chen et al. 2022). The protests took place across 4,600 locations in 150 countries and involved millions of people worldwide (Weston 2019).

These global protests start locally but spread internationally, as was the case with Greta Thunberg and the global climate strike (Chen et al. 2022). New media help create

connections around the world. Local struggles have a global platform for sharing grievances, allowing people to identify their shared experiences of injustices and collectively organize. These examples demonstrate that many large contemporary movements – either transnational movements or local movements that became international– can be understood as global political activities. Given that the motivation to participate in protest is increasingly attached to global processes/global affairs, we propose that the key determinants of protest participation factors – such as political efficacy, political discussion, and political interest – ought to be conceptualized at a broader "global" level. In the following section, we discuss each factor in more detail.

Global Political Efficacy and Protest Participation

Social movement scholars commonly suggest that one's likelihood of participating in protests is intrinsically linked to certain psychological predispositions (Inclán and Almeida 2017; Klandermans 1984; Van Zomeren et al. 2008), though different academics place different emphases on the role of socio-psychological factors in protest participation.

Political efficacy is an important factor that facilitates political participation broadly, and protest participation more specifically. According to Bandura (1997: 3), self-efficacy is defined as “beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments.” As self-efficacy directly impacts how much exertion and perseverance people should use, individuals who question their ability to achieve certain goals are less inclined to follow through with their actions (Bandura 1997).

Political efficacy is especially important in the realm of politics because political participation is often based upon one's expectations that their actions can make a difference (Verba et al. 1995). Specifically, political efficacy becomes consequential in relation to participation in marches and demonstrations that involve a certain level of commitment and

costs (i.e., time) to participate (Klandermans 1984; McAdam 1986). In this case, if one does not believe such actions will make any difference to political outcomes, there is little point in engagement. Klandermans (1984) argues that people tend to make rational decisions about whether to participate in collective action based on the likely costs and benefits of their activities and their fruitfulness, rather than just protest due to complaints and grievances. In line with Klandermans' approach, most social movement scholars consider political efficacy to be an important factor in protest participation, in the sense that individuals who believe their actions have an impact are more likely to participate in politics (e.g., Berenson and Atmor 2020; Corcoran et al. 2015; Corrigan-Brown and Wilkes 2014; Giugni and Grasso 2019; Grasso et al. 2019; Grasso and Giugni 2016; Kim and Lim 2019; Lee et al. 2017; Schussman and Soule 2005; Wauters 2018). We thus expect:

H1: Global political efficacy positively correlates with the likelihood of participating in marches and demonstrations.

Global Political Discussion and Protest Participation

Political discussion – defined by Schmitt-Beck (2008: 341) as “episodes of political conversation and discussion that take place between the non-elite members of a political community” – has long been considered a core feature of democratic processes. Numerous studies find political discussion to be a key antecedent of political participation (Scheufele 2002; Shah et al. 2005). Political discussion provides opportunities for individuals to exchange information, learn about new issues, clarify inconsistencies/ambiguities, and reflect on what they have in mind (Scheufele 2002). In other words, through political discussion, individuals can articulate their thoughts and synthesize previously acquired political information, which makes them more actively engage in processing information (rather than

passively consuming information). This active processing is likely to facilitate further political participation (Shah et al. 2005). In addition, political discussion also fosters political participation by providing individuals with mobilizing information during political discussions – for instance, how to and where to engage in political actions such as protests – which is not often part of media coverage (Boulianne et al. 2020a; Harlow and Harp 2012). By obtaining such information through interpersonal political discussions, individuals can figure out ways to engage in further political actions (Scheufele 2002).

While the positive relationship between political discussion and political participation is largely noted in electoral contexts (e.g., Shah et al. 2005), scholars find this association also holds when people engage in non-institutionalized participation such as protests (e.g., Berenson and Atmor 2020; Lee 2012; Lee et al. 2017; Schussman and Soule 2005; Valenzuela 2013; Wauters 2018).

Aside from the aforementioned mechanisms for how political discussion facilitates political participation in general, political discussion is especially crucial in protest participation. As protesting can be a high-risk and high-effort form of political participation (McAdam 1986), individuals rarely participate unless they are explicitly asked to do so (Klandermans 1997). Such solicitation would likely occur during political discussion and/or conversation. In accordance with this rationale, we expect:

H2: Political discussion about global affairs positively correlates with the likelihood of participating in marches and demonstrations.

Global Political Interest and Protest Participation

Political interest is a crucial precondition for political knowledge and participation (Delli Carpini and Keeter 1996; Verba et al. 1995). While political interest itself is not a

sufficient condition for political participation (Strömbäck and Shehata 2010), political interest still serves as one of the most crucial predictors of various forms of political participation (e.g., Verba et al. 1995). Scholars find that political interest can also be a key determinant of participation in protest activities (e.g., Crepaz et al. 2016; Giugni and Grasso 2019; Grasso and Giugni 2016; Justino and Martorano 2019; Kim and Lim 2019; Kirkizh and Koltsova 2021; Kleiner 2018; Lee et al. 2017; Sánchez and Namhata 2019; Schussman and Soule 2005; Suh and Reynolds-Stenson 2018; Vassallo and Ding 2016). Extending this logic of political interest and protest participation, we expect:

H3: Global political interest positively correlates with the likelihood of participating in marches and demonstrations.

Facebook Use and Protest Participation

Over the past decade, scholars have consistently found a positive relationship between social media use and protest behavior. Boulianne et al. (2020a) offer a summary of 18 studies that consider the role of social media in predicting individual-level protest; notably, studies rarely focus on Facebook (exceptions: Enjolras et al. 2013; Lee 2018; Tufekci and Wilson 2012; Valenzuela et al. 2014; Vissers and Stolle 2014). Several explanations for this relationship have been put forth. One focuses on the informational effects of social media on protest participation. This argument posits that social media are a platform for information or news gathering, helping users easily obtain political information in real time, such as updates about advocacy activities including protest-related information (e.g., where a protest will take place) (Boulianne et al. 2020a; Harlow and Harp 2012; Tufekci and Wilson 2012). A second explanation is that social media provide an optimal platform for users to more readily express their political views (Boulianne et al. 2020a; Chan 2016; Gil de Zúñiga et al. 2014;

Valenzuela et al. 2016), in turn facilitating not only the processing and dissemination of news content but also the furthering of political discussions, which can be conducive to protest participation (Chan 2016; Valenzuela 2013).

While these processes work for social media, in general, Facebook has some specific features that enable collective action. Facebook is the most widely used platform, especially in Western democracies (Newman et al. 2020). This platform allows users to indicate their interest in attending an event and can prompt users' online friends to take an interest as well (Boulianne et al. 2020a). By doing so, Facebook may serve as an important mobilizing mechanism for protest participation. Further, by allowing users to create and form special interest groups with like-minded peers, Facebook represents a new avenue for catalyzing protests (Eltantawy and Wiest 2011; Valenzuela 2013). Several studies show that joining Facebook groups increases the likelihood of participating in collective action (Enjolas et al. 2013; Vissers and Stolle 2014). We propose the combination of following groups and liking political posts (a low-effort form of political expression) will increase the likelihood of protest. Specifically, we hypothesize that:

H4: Civic uses of Facebook positively correlate with the likelihood of participation in marches and demonstrations.

Facebook use can also contribute to the roles of the previously mentioned factors (global efficacy, discussion, interest) in protest participation. Given that social media platforms provide opportunities for individuals to easily and effectively engage in protests, if those who are psychologically inclined to engage in protests also utilize social media to a substantial degree then the likelihood of those individuals engaging in protests will increase (i.e., a synergistic effect). For instance, Lee (2019) found the relationship between political

interest and political participation was particularly strong among heavy social media users, as they could take full advantage of opportunities provided by social media to more actively engage in protests. Facebook use also provides another space for political discussion among friends and other users, reinforcing the process mentioned above. People can easily express their thoughts (e.g., posting their opinion on a newsfeed, leaving comments on news articles/political posts, etc.), which may generate further political conversations (Chan et al. 2017; Valenzuela 2013). Political discussion can occur face-to-face, but Facebook has many advantages as it dramatically reduces the costs and minimizes other resource constraints, such as time and space (Graham 2015). Halpern et al. (2017) use two-wave panel data to consider how Facebook use for political sharing correlates to political efficacy (collective, internal, and external). The role of Facebook in increasing political efficacy, discussion, and interest has been considered, but not in relation to the global dimensions of these concepts. We explore:

RQ1: To what extent do civic uses of Facebook moderate the roles of global political efficacy, discussion, and interest on protest participation?

Cross-national Differences

We outline a model of Facebook use, global connections, and protest participation that should be robust across democratic systems. We recognize that the distribution (and averages, proportions) of each variable differs by country. Grasso and Giugni (2016) report that protest participation is higher in France compared to the United Kingdom, but that the United Kingdom has higher levels of political interest and efficacy. Using the European Social Survey 2006 and 2008, Vassallo and Ding (2016) also document much higher participation in demonstrations in France compared to the United Kingdom.

Within the scholarship on participation in marches and demonstrations, a variety of explanations address cross-national differences in participation. For example, several studies consider, producing mixed results, whether an individual's participation in protest is predicted by Gross Domestic Product per capita (Borbáth and Gessler 2020; Dodson 2015, 2016; Fourcade and Schofer 2016; Justino and Martorano 2019; Kirkizh and Koltsova 2021; Kołczyńska 2020; Sánchez and Namhata 2019; Slavina and Brym 2020; Suh and Reynolds-Stenson 2018; Vassallo and Ding 2016) or quality of democracy (Dodson 2016; Fourcade and Schofer 2016; Justino and Martorano 2019; Kim and Lim 2019; Sánchez and Namhata 2019; Slavina and Brym 2020). Our four countries do not vary much in terms of GDP per capita and democracy scores (Freedom House 2021; World Bank 2018), reflecting a similar case method for comparison studies (Seawright and Gerring 2008).

Dodson (2015) also notes that France has higher protest participation compared to the United Kingdom, with Canada and the United States falling in between these two European countries. Dodson (2015) also considers how globalization has contributed to increases in participation in social movement activities (signing petitions, demonstrations). He found political globalization (a country's membership in international organizations) increased the likelihood of protest, whereas economic globalization (measured in terms of trade and foreign investment) had no influence. In another work, this finding was examined in terms of high-versus low-income countries (Dodson 2016). The effects of globalization are tested at the macro or country level (Dodson 2015, 2016), whereas herein we are proposing that globalization should be considered as a social phenomenon that predicts individuals' participation in marches and demonstrations. This is similar to Baek (2018), except that we consider efficacy, discussion, and interest (and not citizenship). We make a distinct contribution to scholarship with this focus, but also in considering the role of social media use in shaping these global connections.

None of these cross-national studies consider the role of social media use in protest participation. Facebook is widely used in Western democracies. This platform is the same across countries and, as such, we do not expect differences in the relationship between Facebook use and protest participation. The *Reuters Institute Digital News Report 2020* reports that 63% of French and American respondents, 65% of British respondents, and 69% of Canadian respondents use Facebook (Newman et al. 2020). In other words, the adoption of Facebook is consistent across these countries and, thus, we propose the effects of Facebook may also be similar across countries.

RQ2: To what extent do the roles of Facebook uses as well as global political efficacy, discussion, and interest differ cross-nationally when considering participation in marches and demonstrations?

Methods

This paper uses survey data gathered in 2019 in four countries to enable a robust analysis of our theoretical models across a variety of democratic contexts. The countries offer geographic diversity (North America and Europe) as well as linguistic diversity (French and English). However, these countries are similar in many other respects, contributing to model testing among similar cases (Seawright and Gerring 2008). The research is funded by the Social Sciences and Humanities Research Council. The choice of countries is intended to highlight and understand Canada's experiences of digital media and political participation in comparison to its only neighbor (the United States) and its two colonizing countries (the UK, France).

Kantar Group administered the survey in English and French to an online panel, which was matched to the age and sex profiles of each country (see Appendix A1). Kantar reports

on weighting efficiency to reflect the match between the sample characteristics and the census profile of the country. The weighting efficiency was 99.2% in the United States, 99.7% in the United Kingdom, 99.8% in France, and 97.7% in Canada. These weighting efficiencies are very high and thus we decided not to weight the data. Table 1 outlines the descriptive statistics for 6,200 respondents: 1,700 in the United States and 1,500 in each of the United Kingdom, France, and Canada. The data and analysis are available for replication: <https://doi.org/10.6084/m9.figshare.22100117.v1>.

[insert Table 1 here]

Outcome Variable

Protest participation. Following the previous literature (e.g., Boulianne et al. 2020a; Caren et al. 2011; Schussman and Soule 2005; Valenzuela 2013) and major surveys, such as the American General Social Survey and the European Social Survey, survey respondents were asked, “In the past 12 months, have you participated in a march or street demonstration?” Respondents could answer yes (1) or no (0). Respondents from France are more likely to report participation in marches and demonstrations compared to respondents from other countries (ANOVA F-ratio = 34.31, $p < .001$).

Independent Variables

Political efficacy. We measured political efficacy by asking “How much influence do you think someone like you can have over a) national/federal government and b) international political leaders?” on a 5-point scale (1 = not at all, 5 = great deal). The European countries (UK = 2.02, France = 2.03) report lower perceptions, on average, about the ability to influence national leaders compared to the two North American countries (USA = 2.36, Canada = 2.21; ANOVA F-ratio = 33.86, $p < .001$). For influence on international political

leaders, the values are lower (averages between 1.67 and 1.88; ANOVA F-ratio = 11.04, $p < .001$). The two variables about political efficacy are highly correlated ($r = .631$, Table 2).

Political discussion. To measure global discussion, survey respondents were asked “How often have you talked about global affairs?” on a 4-point scale (1 = never, 4 = often). For this measure, France respondents report lower, on average, levels of discussion about global affairs, compared to the other countries (ANOVA F-ratio, 34.36, $p < .001$). The other measure of political discussion uses the same 4-point scale, but the time frame differs: “In the past month, how often have you talked about politics with people around you, not including discussions online or through social media?” For this measure, there are no significant cross-national differences (ANOVA F-ratio = 0.062, $p = .980$). The two variables about political discussion are highly correlated ($r = .654$, Table 2).

Political interest. To measure global political interest, survey respondents were asked “How interested are you in global political issues or current affairs?” on a 4-point scale (1 = not at all interested, 4 = very interested). Again, we see that France respondents report lower, on average, levels of interest in global affairs (ANOVA F-ratio = 30.91, $p < .001$). Using the same response options, we asked, “How interested would you say you are in politics?” These respondents also report lower, on average, interest in politics, in general (ANOVA F-ratio = 42.20, $p < .001$). The two variables about political interest are highly correlated ($r = .765$, Table 2).

Civic uses of Facebook. All survey respondents ($n = 6,300$) were asked how often they used Facebook. If they used Facebook ($n = 4,676$), they were then asked about liking, commenting, or sharing on Facebook political posts or comments by three different types of

people: their friends; political parties or candidates; or a non-profit organization or charity (such as an environmental organization or the Red Cross). They were also asked about whether they follow three different types of groups and organizations on Facebook: a news organization, a political party or candidate, or a non-profit organization or charity (such as an environmental organization or the Red Cross). Responses (no = 0, yes = 1) to this series of activities were added up to create an index of civic uses of Facebook reflecting users' interactions with news organizations, nonprofit organizations, friends, and political parties/candidates (ranging from 0 to 6; see Table 1). Table 1 also includes the scale reliability statistics for each country. Overall, respondents from the United States score higher on civic uses of Facebook compared to respondents in other countries (ANOVA F-ratio = 17.91, $p < .001$). Civic uses of Facebook are correlated with measures of political efficacy, political interest, and political discussion (Pearson's correlations range from .252 to .368, Table 2).

Control Variables

Based on previous social movement research, we included a number of control variables.

Political ideology. We included political ideology as a control variable following previous literature that finds left-wing ideology is a significant factor in predicting protest participation (e.g., Berenson and Atmor 2020; Borbáth and Gessler 2020; Caren et al. 2011; Corcoran et al. 2015; Corrigan-Brown and Wilkes 2014; Dodson 2015; Grasso and Giugni 2016; Kleiner 2018; Schussman and Soule 2005; Suh and Reynolds-Stenson 2018; Valenzuela 2013; Vassallo and Ding 2016). To measure political ideology, survey respondents were asked "In politics, people sometimes talk of left and right. Where would you place YOURSELF on this

scale?” on a 10-point scale. Those who identify themselves as “left” (0 to 3) were coded as 1, while all others were coded as 0.

Demographics. We also included a series of demographic factors related to protest participation. Age was controlled because young people are more likely to protest (Caren et al. 2011; Grasso and Giugni 2016; Schussman and Soule 2005) and use social media (Newman et al. 2020). We also controlled for gender and education. Education was based on whether or not the respondent had completed post-secondary education. Gender was coded as females (1) and males (0).

[insert Table 2 here]

Results

Because our dependent variable is measured dichotomously, we conducted logistic regression analysis. H1 examines the impact of global political efficacy on participation in protest events. As shown in Table 3, the coefficient is positive and significant (Exp (B) = 1.44, $p < .001$). In other words, those who report higher levels of global political efficacy are more likely to engage in protest. Perceived ability to influence international leaders is significantly correlated with protest participation, after accounting for the perceived ability to influence national leaders and its role on protest (Exp (B) = 1.27, $p < .001$).

[insert Table 3 here]

H2 examines the role of global political discussion on participation in protest events. As shown in Table 3, the coefficient is positive and significant (Exp (B) = 1.25, $p = .003$). In other words, those who frequently talk about global political affairs are more likely to engage in protest. Discussion of global affairs is significantly correlated with protest participation,

after accounting for the role of generic political discussion in protest ($\text{Exp (B)} = 1.43, p < .001$).

H3 is about the role of global political interest in participation in protest events. As shown in Table 3, the coefficient is positive but not significant. The traditional measure of political interest (not specific to global issues) is weakly and positively related to protest ($\text{Exp (B)} = 1.22, p = .024$).

H4 examines the role of civic uses of Facebook (i.e., following different groups, interacting with their posts) on protest participation. As shown in Table 3, the coefficient is positive and significant ($\text{Exp (B)} = 1.28, p < .001$). In other words, those who use Facebook for civic purposes are also more likely to participate in protest events.

We account for the countries in our multivariate models. We created dummy variables for each country and used the United States as the reference group. French respondents are more likely to protest compared to respondents from the United States ($\text{Exp (B)} = 4.39, p < .001$). Respondents from Canada ($\text{Exp (B)} = 1.42, p = .021$) and the UK ($\text{Exp (B)} = 1.37, p = .046$) are more likely to protest than their American counterparts.

RQ1 addresses the interaction effects among Facebook use and the global connections measures. The theory is that civic uses of Facebook would moderate the effects of these global variables on protest participation. For global political efficacy, civic uses of Facebook moderates the effects of global efficacy on protest participation (see Model 2 in Table 3). For global political interest, civic uses of Facebook do not significantly amplify the effects on protest participation (see Model 3 in Table 3). For political discussion, the interaction variable is positive but not statistically significant (Model 4 in Table 3). As such, for global political discussion, civic uses of Facebook do not significantly alter the effects on protest participation.

As noted, the national and global dimensions of efficacy, interest, and discussion are highly correlated. However this did not impact our findings in relation to H1-H4. As a robustness check, we replicated Table 3 excluding the national dimensions of these variables. These additional results are included in Table 4.

As mentioned, we do not expect the theoretical model to differ across countries. However, as a robustness check, we present the results for our four primary hypotheses (RQ2). Figure 1 presents the marginal effects (with 95% confidence intervals) of our four key variables for each of the four countries (full models are in Appendices A2 and A3). When the intervals overlap, we interpret these coefficients as roughly similar in magnitude. When the intervals do not overlap, we interpret these coefficients as being distinctive. For global political efficacy and civic uses of Facebook, the country-specific coefficients are consistently positive and significant. For global political discussion, the country-specific coefficients are all positive but weak. For global political interest, the coefficients are weak and not significant, as observed in the original model (Table 3). Despite the ample possibilities, we do not find significant cross-national differences in the role of these variables on protest participation.

Discussion

Global political efficacy and global political discussion increase the likelihood of participating in marches and demonstrations. In other words, individuals who believe they can influence international leaders and those who frequently talk about global political issues are more likely to take part in protest activities. Our examination is consistent with existing research, which finds that perceived ability to influence national leaders and generic political discussion are significant predictors of individual's protest participation (e.g., Berenson and Atmor 2020; Wauters 2018); yet, the current study expands upon previous research on this

topic in that we discuss these variables in a global framing. This perspective is timely and critical as contemporary protests are becoming increasingly attached to global processes/events. While academic researchers and the press discuss the global nature of protest (Bennett 2005; Boulianne et al. 2020b; Earl et al. 2015), minimal research empirically tests how global connections influence protest participation (exception: Baek 2018 using a USA survey conducted in 2014). Protest is distinct as a form of political participation because it is not attached to any specific state (Theocharis and van Deth 2018) and has global visibility through media coverage (Boulianne et al. 2020a; Harlow and Harp 2012).

Our model controls for political efficacy, discussion, and interest at the national and global levels. We are not proposing that global dimensions replace national factors, but rather that there is value in considering the distinct relationship between global dimensions and protest participation. The global dimensions are important in the context of a cross-national survey. Plenty of studies consider national processes and offer context-specific theories. We move beyond these idiosyncratic explanations to understand transnational protests and the processes that support them.

We also find that protest participation is positively associated with civic uses of Facebook. Positive correlations between Facebook use and protest participation have also been noted in other studies (Enjolras et al. 2013; Lee 2018; Tufekci and Wilson 2012; Valenzuela et al. 2014; Vissers and Stolle 2014). The focus on Facebook is important as it speaks to the unique features of this platform in terms of creating ties (following accounts) and interacting with content (liking), as well as organizing protests through the creation and sharing of event information. Facebook use is a popular platform in Western democracies (Newman et al. 2020), so considering its unique features and how it contributes to protest is important.

While our theoretical model is tested and found to be robust across the four countries, our study did reveal some cross-national differences related to descriptive statistics rather than mobilization processes. In particular, France is distinctive in relation to our four key variables. Other studies have established that French citizens are more likely to report participation in marches and demonstrations (Dodson 2015; Grasso and Giugni 2016; Vassallo and Ding 2016). The existing comparative research would point to GDP per capita or quality of democracy as possible explanations. However, France is not exceptional in relation to these dimensions when compared to the other three countries in our sample (Freedom House 2021; World Bank 2018). Instead of looking to economic or political institutions to explain these differences, scholarship should explore citizens' distinctive political repertoires. French respondents have a distinctive composition to their political activities.

Nonetheless, the current study has several limitations. Due to the cross-sectional nature of the study, we cannot establish the sequence of the variables. However, the scholarship has consistently modeled social media use and political efficacy, discussion, and interest as predictors of participation in protests. We follow these examples.

A second limitation is related to the conceptualization and operationalization of protest participation. Simply asking whether respondents have any experience (in the past 12 months) of participating in a march or street demonstration cannot determine the sort of protest events in which they partook. Future research could categorize various types of protest participation (including protest participation with regard to global issues) to facilitate a more accurate explanation of the findings. For example, Baek (2018) finds that local citizenship predicts local political participation and global citizenship predicts global political participation, with online media positively correlated with both types of participation. While we find substantial correlations between global connections and our generic measure of

protest, we expect these correlations would be larger if we measured participation in marches and demonstrations about global issues. However, the specificity would limit our conclusions to these specific types of events, and thus the external validity of our findings. Our findings suggest a narrow definition of protest is not required. In addition, participation in marches and demonstrations is quite rare. Indeed, the activity is so rare that many scholars ask whether respondents had ever participated in this activity during their lifetime (Dodson 2015; Wauters 2018). Given the rarity, narrowing to specific types of protest would limit our analysis to a few hundred people who participate in these specific events.

The overall purpose of this study was to investigate how global connections (i.e., global political efficacy, political discussion, and political interest) and Facebook use influence participation in marches and demonstrations. In summary, we find that talking about global issues, believing one has an influence on international political leaders, and using Facebook for civic purposes are positively correlated with protest participation. We offer a test of these interconnected variables using a four-country sample. We conclude that our theoretical model is quite robust across these Western democratic countries, particularly around the role of global political efficacy and civic uses of Facebook on protest participation. Our study offers a distinct and original contribution to existing scholarship about the mechanisms for protest participation. In terms of the implications of our findings, we expect that an increase in global digital connections (on Facebook or another platform) will likely increase protest participation. In other words, more global information and communication will yield more global engagement, which may include protest. Even in countries where there might not be reasons to protest, we might observe increased protest activity as people are motivated to express discontent about global issues.

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Table 1. Descriptive Statistics

	USA Mean (SD)	UK Mean (SD)	France Mean (SD)	Canada Mean (SD)	Pooled
Gender (female)	51.8%	49.2%	50.5%	53.3%	51.2%
Education (post- secondary)	59.9%	44.2%	43.2%	57.6%	51.5%
Age 18 to 24	11.3%	11.2%	10.4%	8.7%	10.4%
Age 25 to 44	34.0%	33.5%	30.9%	33.8%	33.1%
Age 45 or more	54.7%	55.3%	58.7%	57.5%	56.5%
Left wing	22.1%	18.8%	21.9%	21.2%	21.0%
Protest participation	10.5%	9.5%	19.9%	10.3%	12.4%
Political efficacy	2.36 (1.20)	2.02 (1.06)	2.03 (1.13)	2.21 (1.09)	2.16 (1.13)
Global political efficacy	1.86 (1.19)	1.67 (1.03)	1.88 (1.18)	1.77 (1.08)	1.80 (1.13)
Political discussion	2.47 (0.99)	2.47 (0.99)	2.45 (0.99)	2.46 (0.95)	2.46 (0.98)
Global political discussion	2.25 (0.96)	2.38 (0.94)	2.04 (0.97)	2.25 (0.91)	2.23 (0.95)
Political interest	2.78 (1.00)	2.63 (0.92)	2.40 (0.97)	2.61 (0.95)	2.61 (0.97)
Global political interest	2.65 (0.94)	2.61 (0.88)	2.36 (0.95)	2.57 (0.92)	2.55 (0.93)
Civic uses of Facebook	1.54 (1.76)	1.10 (1.44)	1.17 (1.45)	1.29 (1.61)	1.28 (1.59)
Cronbach's Alpha	0.776	0.698	0.675	0.745	0.734

Table 2. Pearson's Zero-Order Correlation Matrix

		1	2	3	4	5	6	7	8	9	10	11	12
1 Protest	r	1											
	p												
	n	6290											
2 Females	r	-.052	1										
	p	<.001											
	n	6262	6263										
3 Post-secondary education	r	.056	.015	1									
	p	<.001	.233										
	n	6290	6263	6291									
4 Age 25 to 44	r	.094	.122	.115	1								
	p	<.001	<.001	<.001									
	n	6290	6263	6291	6291								
5 Age 45 or more	r	-.167	-.154	-.077	-.801	1							
	p	<.001	<.001	<.001	<.001								
	n	6290	6263	6291	6291	6291							
6 Left wing	r	.055	.011	.077	-.003	-.025	1						
	p	<.001	.407	<.001	.802	.063							
	n	5723	5703	5723	5723	5723	5723						
7 Political interest	r	.183	-.205	.170	-.078	.100	.136	1					
	p	<.001	<.001	<.001	<.001	<.001	<.001	<.001					
	n	6290	6263	6291	6291	6291	5723	6291					
8 Global political interest	r	.175	-.164	.182	-.044	.064	.138	.765	1				
	p	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001				
	n	6290	6263	6291	6291	6291	5723	6291	6291				
9 Political discussion	r	.197	-.077	.112	-.058	.087	.144	.570	.534	1			
	p	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001			
	n	6290	6263	6291	6291	6291	5723	6291	6291	6291			
10 Global political discussion	r	.195	-.107	.179	-.028	.033	.131	.543	.600	.654	1		
	p	<.001	<.001	<.001	.028	.008	<.001	<.001	<.001	<.001	<.001		
	n	6289	6262	6290	6290	6290	5722	6290	6290	6290	6290		
11 Political efficacy	r	.293	-.070	.123	.145	-.200	.024	.368	.366	.241	.280	1	
	p	<.001	<.001	<.001	<.001	<.001	.064	<.001	<.001	<.001	<.001	<.001	
	n	6289	6262	6290	6290	6290	5722	6290	6290	6290	6289	6290	
12 Global political efficacy	r	.311	-.047	.063	.205	-.278	-.047	.210	.217	.124	.162	.631	1
	p	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
	n	6285	6258	6286	6286	6286	5719	6286	6286	6286	6285	6285	6286
13 Civic uses of Facebook	r	.286	-.017	.126	.110	-.148	.125	.363	.368	.359	.355	.329	.252
	p	<.001	.251	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
	n	4676	4657	4676	4676	4676	4269	4676	4676	4676	4676	4675	4672

Table 3. Logistic Regression Model Predicting Protest Participation

	b	S.E.	Exp (B)	p-value
<i>Model 1: Full model</i>				
Females	-0.237	0.106	0.789	.025
Post-secondary education	0.162	0.108	1.176	.133
Age 25 to 44	-0.639	0.145	0.528	<.001
Age 45 or more	-1.347	0.155	0.260	<.001
Left wing	0.224	0.119	1.251	.061
France	1.479	0.146	4.388	<.001
United Kingdom	0.317	0.159	1.373	.046
Canada	0.348	0.151	1.417	.021
Political efficacy	0.235	0.058	1.265	<.001
Global political efficacy	0.364	0.051	1.439	<.001
Political discussion	0.357	0.079	1.429	<.001
Global political discussion	0.220	0.075	1.246	.003
Political interest	0.200	0.088	1.221	.024
Global political interest	-0.140	0.089	0.869	.116
Civic uses of Facebook	0.246	0.031	1.280	<.001
Model information	n= 4248 , -2 Log Likelihood = 2582			
<i>Model 2:</i>				
Full model + FB * global efficacy	-0.044	0.021	0.957	.040
Model information	n= 4248 , -2 Log Likelihood = 2578			
<i>Model 3:</i>				
Full model + FB * global interest	0.009	0.036	1.009	.804
Model information	n= 4248 , -2 Log Likelihood = 2582			
<i>Model 4:</i>				
Full model + FB * global discussion	0.061	0.033	1.063	.060
Model information	n= 4248 , -2 Log Likelihood = 2579			

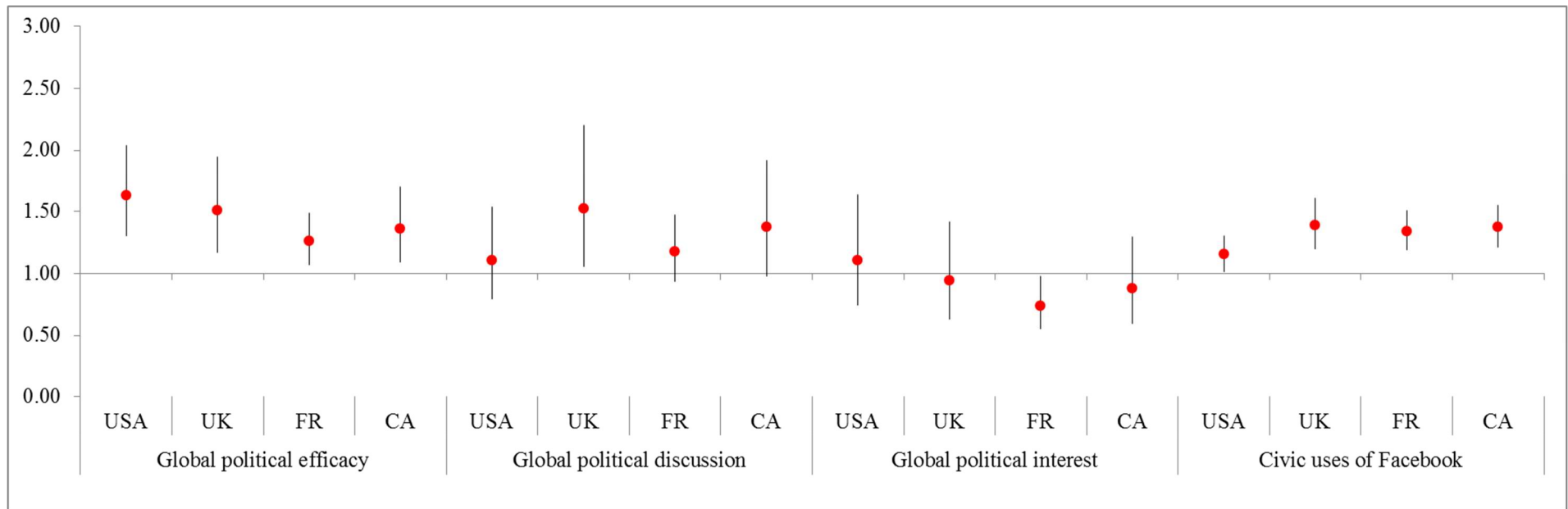
Note: The reference groups for the analysis are: US respondents for the series of country variables, males, high school or less, those aged 18 to 24 years, and those who are in the center/moderate/neither left nor right in terms of political ideology. FB = Civic uses of Facebook

Table 4. Logistic Regression Model Predicting Protest Participation (without the national dimensions of efficacy, interest, and discussion)

	b	S.E.	Exp (B)	p-value
<i>Model 1: Full model</i>	-0.274	0.104	0.760	.008
Females	0.155	0.107	1.167	.149
Post-secondary education	-0.600	0.143	0.549	<.001
Age 25 to 44	-1.260	0.151	0.284	<.001
Age 45 or more	0.266	0.118	1.304	.024
Left wing	1.380	0.142	3.974	<.001
France	0.228	0.156	1.257	.144
United Kingdom	0.301	0.150	1.351	.045
Canada	0.484	0.041	1.623	<.001
Global political efficacy	0.414	0.067	1.513	<.001
Global political discussion	0.095	0.074	1.100	.196
Global political interest	0.283	0.031	1.328	<.001
Civic uses of Facebook	-0.274	0.104	0.760	.008
Model information	n= 4249 , -2 Log Likelihood = 2633			
<i>Model 2:</i>				
Full model + FB * global efficacy	-0.043	0.021	0.958	.039
Model information	n= 4249 , -2 Log Likelihood = 2629			
<i>Model 3:</i>				
Full model + FB * global interest	-0.004	0.035	0.996	.915
Model information	n= 4249 , -2 Log Likelihood = 2633			
<i>Model 4:</i>				
Full model + FB * global discussion	0.040	0.032	1.041	.215
Model information	n= 4249 , -2 Log Likelihood = 2631			

Note: The reference groups for the analysis are: US respondents for the series of country variables, males, high school or less, those aged 18 to 24 years, and those who are in the center/moderate/neither left nor right in terms of political ideology. FB = Civic uses of Facebook

Figure 1. Marginal Effects (95% Confidence Intervals) Predicting Protest Participation



Note: Full models are report in Appendix Tables A2 and A3. Because these are odds ratios from logistic regression, the line at 1.00 represents no relationship between the variables.

Appendix A1. Demographic comparison of sample and population

		USA	UK	France	Canada
18-24	Official	12%	11%	10%	11%
	Survey	11%	11%	10%	9%
25-34	Official	18%	17%	15%	16%
	Survey	18%	17%	15%	17%
35-44	Official	16%	16%	16%	16%
	Survey	16%	16%	16%	17%
45-54	Official	17%	18%	17%	18%
	Survey	17%	18%	17%	17%
55+	Official	37%	37%	42%	39%
	Survey	38%	37%	42%	40%
Male	Official	49%	51%	49%	49%
	Survey	48%	51%	49%	46%
Female	Official	51%	49%	51%	51%
	Survey	52%	49%	51%	53%

U.S.

Age and sex (2017): Age in Entire U.S. for 2017 American Community Survey

U.K.

Age and sex (2016):

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2016#main-points>

France

Age and sex (2018):

<https://www.insee.fr/en/statistiques/2382609?sommaire=2382613>

Canada

Age groups and sex (2016):

<https://www12.statcan.gc.ca/datasets/Index-eng.cfm?Temporal=2016&Theme=115&VNAMEE=&GA=-1&S=0>

Appendix A2. European Models for Predicting Protest Participation

UK	b	S.E.	Exp (B)	p-value
Females	0.130	0.261	1.138	.620
Post-secondary education	0.218	0.247	1.243	.379
Age 25 to 44	-0.264	0.313	0.768	.398
Age 45 or more	-0.797	0.366	0.450	.029
Left wing	0.019	0.290	1.020	.947
Political efficacy	0.334	0.146	1.396	.022
Global political efficacy	0.412	0.129	1.510	.001
Political discussion	-0.006	0.184	0.994	.973
Global political discussion	0.421	0.188	1.524	.025
Political interest	0.279	0.217	1.322	.199
Global political interest	-0.056	0.208	0.945	.786
Civic uses of Facebook	0.328	0.076	1.388	<.001
Model information	n = 988, -2 Log Likelihood = 494			
France	b	S.E.	Exp (B)	p-value
Females	-0.473	0.177	0.623	.007
Post-secondary education	-0.173	0.177	0.841	.328
Age 25 to 44	-0.555	0.258	0.574	.032
Age 45 or more	-0.989	0.261	0.372	<.001
Left wing	0.277	0.198	1.319	.163
Political efficacy	0.124	0.092	1.132	.179
Global political efficacy	0.234	0.083	1.263	.005
Political discussion	0.495	0.122	1.641	<.001
Global political discussion	0.162	0.115	1.176	.159
Political interest	0.329	0.135	1.390	.015
Global political interest	-0.304	0.144	0.738	.035
Civic uses of Facebook	0.295	0.060	1.343	<.001
Model information	n = 1020, -2 Log Likelihood = 884			

Note: The reference groups for the analysis are: males, high school or less, those aged 18 to 24 years, and those who are in the center/moderate/neither left nor right in terms of political ideology.

Appendix A3. North American Models for Predicting Protest Participation

USA	b	S.E.	Exp (B)	p-value
Females	-0.051	0.231	0.951	.826
Post-secondary education	0.641	0.263	1.899	.015
Age 25 to 44	-0.927	0.303	0.396	.002
Age 45 or more	-2.117	0.373	0.120	<.001
Left wing	-0.075	0.275	0.927	.784
Political efficacy	0.372	0.135	1.451	.006
Global political efficacy	0.491	0.114	1.633	<.001
Political discussion	0.378	0.183	1.459	.039
Global political discussion	0.102	0.167	1.107	.542
Political interest	0.031	0.203	1.031	.881
Global political interest	0.098	0.201	1.103	.624
Civic uses of Facebook	0.143	0.064	1.153	.025
Model information	n = 1166, -2 Log Likelihood = 560			
Canada	b	S.E.	Exp (B)	p-value
Females	-0.306	0.228	0.737	.180
Post-secondary education	0.343	0.251	1.409	.173
Age 25 to 44	-0.953	0.321	0.386	.003
Age 45 or more	-1.730	0.340	0.177	<.001
Left wing	0.578	0.249	1.783	.020
Political efficacy	0.269	0.126	1.309	.032
Global political efficacy	0.310	0.113	1.364	.006
Political discussion	0.251	0.178	1.286	.159
Global political discussion	0.317	0.172	1.372	.066
Political interest	0.064	0.199	1.066	.749
Global political interest	-0.128	0.199	0.880	.520
Civic uses of Facebook	0.318	0.063	1.374	<.001
Model information	n = 1074, -2 Log Likelihood = 573			

Note: The reference groups for the analysis are: males, high school or less, those aged 18 to 24 years, and those who are in the center/moderate/neither left nor right in terms of political ideology.