**Political Disagreement and the Political Participation of Youth: Comparing Online and Offline Settings**

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Abstract:

In today’s highly polarized and often uncivil political environment, how does engaging with political disagreement influence the political participation of youth? Exposure to political disagreement is shown to have varying influences on political behavior. While many suggest that encountering political disagreement is an important element of democracy and can have a positive influence on political knowledge and public opinion, others show that it may have a deleterious effect on political participation and underlying democratic values. In this paper, we explore what influence exposure to, and engaging with, disagreement has on the political behavior of youth in online and interpersonal settings. Using a nationally representative sample of youth age 15-25 (n = 2,920) we find that exposure to disagreement, especially online, has a positive relationship with traditional and online forms of political participation. Additionally, we find that engaging in disagreement online, but not face-to-face, predicts higher levels of online participation. These findings suggest that engaging with political disagreement in the online setting may provide a way for youth to grapple with complex issues in a way that leads to higher levels of political engagement.

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Key words: Disagreement, political participation, youth, Internet, online setting, interpersonal, mediated, communication

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Though there are independent and extensive bodies of research on the political engagement of youth and the consequences of political disagreement, it remains unclear what influence exposure to political disagreement has on the political engagement of youth specifically. Additionally, while previous research identifies many sources of exposure to political information and disagreement for youth including the home, school, and extracurricular activities, the online setting remains relatively unexplored in this regard. In this research we examine two questions that are understudied in the literature: how does reported *exposure* to political disagreement influence the political participation of youth? And how does *engaging* with those you disagree with influence the political participation of youth? Furthermore, we are interested in whether these relationships differ between online and interpersonal settings.

Although we might not expect youth to be particularly interested in politics or seeking of political information, studies often show that youth are exposed to political information and disagreement as part of their daily non-political activities in online and face-to-face settings. A 2015 survey by Pew found that 92% of teens go online daily[[1]](#footnote-1) where exposure to political diversity is quite common ([Kim, 2011](#_ENREF_22); [Wojcieszak & Mutz, 2009](#_ENREF_49)). For example, Kahne, Lee, and Feezell ([2012](#_ENREF_21)) show through a panel study of juniors and seniors in high school that interest-driven online participation (as well as politically-driven participation) causes youth to be exposed to more diverse perspectives than they would otherwise encounter. The authors also find that interest-driven participation online leads to higher levels of offline participation in the form of civic engagement, political action and expression, and campaign participation ([Kahne, Lee, & Feezell, 2013](#_ENREF_19)).

Youth encounter political diversity in interpersonal settings as well. Most youth attend schools where they meet diverse populations in class, in the halls, and in after school activities through which they may be exposed to political and social perspectives that differ from their own ([Campbell, 2006](#_ENREF_6); [Kahne & Middaugh, 2008](#_ENREF_20); [McFarland & Thomas, 2006](#_ENREF_29)). These findings suggest that youth, even those who do not actively seek out political information, do encounter political information and diverse perspectives as a result of daily routines and apolitical activities. Despite our growing understanding of the regularity with which youth encounter political diversity, we know relatively little about the consequences of this exposure for their political behavior.

It is important to develop our understanding of the influence of political disagreement on youth for at least two reasons. First, while many studies examine the influence of disagreement on the political participation of adults, youth might be comparatively more susceptible to political disagreement or exhibit distinct responses. Additionally, youth age 15-25 are in their “formative” political years where the opinions and behaviors developed during this period can mature into long-lasting patterns of political engagement ([Jennings & Niemi, 1981](#_ENREF_16); [Niemi & Hepburn, 1995](#_ENREF_36)). In this paper we seek to understand not only the influence of reported *exposure* to political disagreement that youth encounter in online and face-to-face settings, but also how *engaging* with those they disagree with in these settings can impact their political behavior; this is a necessary preliminary step for future research to explicate how exposure to political disagreement as a youth may socialize political engagement later in life.

**Political Disagreement, Political Participation, and the Importance of Settings**

The research on exposure to political disagreement draws several, often conflicting, conclusions about the impact it has on political behavior. Many would agree that general deliberation on policy issues and political events is paramount to a healthy democracy ([Dewey, 1916](#_ENREF_7); [Habermas, 1989](#_ENREF_10)). However, deliberation can involve exposure to political cross pressures that some scholars find to have negative consequences. For example, Diana Mutz ([2002](#_ENREF_34), [2006](#_ENREF_35)) shows that exposure to cross-cutting political opinion in face-to-face environments generates social pressure and political ambivalence, which result in lower voter turnout (see also [Noelle-Neumann (1984](#_ENREF_37)) and [Wojcieszak, Baek, and Carpini (2010](#_ENREF_48))). Additionally, Torcal and Maldonado ([2014](#_ENREF_45)) show that face-to-face exposure to disagreement can also lead to lower levels of political interest, a contributing factor to political participation. The negative consequences of exposure to face-to-face disagreement appear to extend to both political participation, as well as its underlying values.

However, other research finds that exposure to disagreement exerts a positive influence on certain forms of engagement ([Lee, Kwak, & Campbell, 2015](#_ENREF_27); [Pattie & Johnston, 2009](#_ENREF_39)). Scheufele, et al. ([2004](#_ENREF_41)) show that heterogeneous networks predict higher rates of political knowledge and political interest. Similarly [McLeod et al. (1999](#_ENREF_31)) offer that exposure to diverse opinions leads to self-reflection, which subsequently results in higher levels of political participation. While many studies claim exposure to political disagreement has harmful effects for democracy, there seem to be as many that find the opposite, and a consensus ultimately remains illusive.

Several caveats illuminate some of the divergent findings regarding the relationship between exposure to disagreement and political behavior. [Klofstad, Sokhey, and McClurg (2013](#_ENREF_24)) call attention to variation in the conceptualization of “disagreement” and how variation in the extent of disagreement that one encounters may lead to some of the empirical differences we observe. Additionally, the influence of disagreement in social contexts is conditional upon several factors such as the broader political environment ([Huckfeldt & Sprague, 1987](#_ENREF_13); [McClurg, 2006](#_ENREF_28)) and an individual’s orientation toward conflict, which can mitigate the negative effects ([Testa, Hibbing, & Ritchie, 2014](#_ENREF_44)). These clarifications of the causal mechanisms have helped to qualify previous findings and inform the research described herein.

Recent research has also improved our understanding of the importance of the setting for disagreement as well. The field of deliberative democracy and studies of exposure to disagreement are strongly rooted in face-to-face, or interpersonal, interactions. However, with the proliferation of partisan news and Internet usage, scholars turned their attention towards mediated forms of disagreement as well. [Wojcieszak and Mutz (2009](#_ENREF_49)) investigate the impact of exposure to political diversity online and find that non-political online activity (such as professional or hobby-based online groups) provides significant exposure to political disagreement. Additionally, online deliberation can produce higher levels of political knowledge and political efficacy because online expression is often more candid and direct than opinions expressed in face-to-face interactions ([Min, 2007](#_ENREF_32)). Relatedly, [Torcal and Maldonado (2014](#_ENREF_45)) demonstrate that exposure to divergent viewpoints through mass media actually increases political interest because the emotional costs that accompany face-to-face disagreement are absent. Compared to interpersonal disagreement, engaging with disagreement online generally yields more positive findings in terms of predicting social trust ([Price & Cappella, 2002](#_ENREF_40)), willingness to express opinions ([Ho & McLeod, 2008](#_ENREF_12)), and fostering engaged citizenship norms ([Kittilson & Dalton, 2011](#_ENREF_23)). These findings indicate that the setting for exposure to disagreement, whether it is mediated or interpersonal, plays a significant role in the potential effects observed. However, the influence of online disagreement on measures of political participation is less clear, and so our research contributes to this larger debate.

In this study, we seek to clarify the unique influence that the setting for political disagreement, whether online or interpersonal, has on the relationship between political disagreement and political participation. We focus on how exposure to disagreement impacts the political behavior of youth in particular. Youth are of particular interest because they are in their politically formative years; they are relatively less partisan than adults; and they are in the process of developing political behaviors and attitudes that will endure over time. Therefore it is worthwhile to ask, how does exposure to disagreement influence the political behavior of youth? Below we develop distinct hypotheses about the impact of exposure to disagreement on American youth, which we test in the following section.

**Political Disagreement and Youth**

The study of political disagreement stems largely from the broader literature on deliberative democracy. As a result, the dependent variables of interest usually include political participation and civic engagement, and samples are generally limited to adults of voting age. Though it is important to explore the ways that exposure to cross-cutting political information impacts eligible participants in traditional forms of political participation, these restrictions overlook youth, who are perhaps more vulnerable to the effects of political disagreement as they develop their political repertoires.

Youth are arguably more susceptible to the effects of disagreement for two reasons. First, youth are in their politically formative years. Although there is some debate about which values endure—and to what extent—into adulthood, it is generally agreed that political attitudes are not spontaneously formed as soon as one reaches voting age (for an excellent summary see [David O. Sears (1990](#_ENREF_42))). [Niemi and Hepburn (1995](#_ENREF_36)) highlight the importance of focusing on late adolescence (age 14 until the mid-twenties) as a prominent stage of political socialization because it is a period of psychological and social change, as well as a time during which youth often encounter citizenship education programs. The interactions youth have during this period influence political habits later in life, so understanding the impact of particular types of interactions on the political participation of youth is of critical importance for the study of political behavior.

Political socialization comes from many agents and events in one’s life ([David O Sears & Valentino, 1997](#_ENREF_43)). Political scientists interested in the political values and behaviors of youth have focused significant attention on the persuasive role of parents via the “primacy principle.” According to the primacy principle, political values and behaviors that are learned early in life endure with little modification, and though this is subject to some qualification ([Jennings & Markus, 1984](#_ENREF_14)), the combination of life cycle staging with influential agents contributes to periods of vulnerability and attitude formation in youth that endure to a large extent into adulthood ([Andolina, Jenkins, Zukin, & Keeter, 2003](#_ENREF_1); [Bengtson, Biblarz, & Roberts, 2002](#_ENREF_4); [Easton & Dennis, 1965](#_ENREF_8); [Hess & Torney, 1968](#_ENREF_11); [Jennings & Niemi, 1974](#_ENREF_15); [Jennings, Stoker, & Bowers, 2009](#_ENREF_17); [McIntosh, Hart, & Youniss, 2007](#_ENREF_30)). The influence of parents in the political socialization of their children appears to be strongest; however, family is not the only source of political socialization.

Outside of the home, various settings in a child’s life matter to her political development. For example, schools can promote particular ideas and influence a child’s future political values and behaviors. Using two longitudinal data sets, McFarland and Thomas ([2006](#_ENREF_29)) examine data on the scholastic experiences of more than 24,000 students from high schools around the country. The authors find that particular school assignments, such as speaking in a public forum, impact political participation rates later in life. Additionally, extracurricular activities, such as after school volunteer programs, generate a sense of community, leading to future political participation that utilizes such skills (see also ([Beck & Jennings, 1982](#_ENREF_3); [Campbell, 2006](#_ENREF_6); [Kahne & Middaugh, 2008](#_ENREF_20); [Verba, Schlozman, & Brady, 1995](#_ENREF_47)). These studies offer support for our expectation that online and face-to-face exposure to disagreement may influence the political participation of youth.

The second reason youth might be particularly prone to effects resulting from exposure to disagreement is that they are less politically committed than most adults. Studies of communication effects often show that the strongest effects on behaviors and opinions are concentrated in the most politically ambivalent subjects. In their study of exposure to partisan news, Arceneaux and Johnson ([2013](#_ENREF_2)) show that partisan news has the strongest influence on entertainment seekers, who differ from news seekers in terms of their level of ideological commitment. News seekers have more established attitudes and preferences; pro-attitudinal news reinforces their positions, whereas counter-attitudinal news encourages reevaluation of their political stances ([Kunda, 1990](#_ENREF_26)). Entertainment seekers, however, who would normally avoid news exposure, are generally less politically informed and ideologically committed, making them more vulnerable to politicized messages ([Zaller, 1992](#_ENREF_50)). Priming effects are strongest among these political novices, meaning that novices are more likely consider the information they have been exposed to when making political evaluations ([Krosnick & Kinder, 1990](#_ENREF_25)).

While media effects are strongest among the least politically interested, this group is also more likely to choose entertainment over news and therefore rarely encounter political information, let alone political disagreement. However, as Kahne, Lee, and Feezell ([2012](#_ENREF_21)) show, by engaging in interest-based activities online youth encounter greater political diversity than they would have otherwise. Similarly, Mutz ([2001](#_ENREF_33)) shows that media generally convey greater ideological diversity than interpersonal networks do ([Brundidge, 2010](#_ENREF_5); [Kim, 2011](#_ENREF_22); [Wojcieszak & Mutz, 2009](#_ENREF_49)). Youth go online with greater frequency than any other age group, *and* they are less politically committed than adults. As a result, there is potential for the dissonant information youth encounter to have a significant influence on their attitudes, values, and political behavior.

Studies of the relationship between disagreement and political behavior utilize many conceptualizations of disagreement from observed deliberation to self-reported exposure to cross-cutting news. In this study, we are interested in examining disagreement at two levels: self-reported *exposure* to political disagreement and self-reported *engagement* with those one disagrees with. Compared to exposure, engaging in political disagreement in the online or face-to-face setting represents a more substantial level of involvement with disagreement that requires first the recognition of disagreement and then a willingness to respond to those one disagrees with. We proceed by testing four hypotheses. First, we follow Mutz (2002) and anticipate that youth who are exposed to and engage with interpersonal disagreement will demonstrate lower levels of traditional political participation due to sentient social pressures.

**H1:** Interpersonal Disagreement and Traditional Political Participation

 **H1a:** Interpersonal *exposure* to political disagreement will predict lower levels of traditional political participation.

 **H1b:** Interpersonal *engagement* with disagreement will predict lower levels of traditional political participation.

Exposure to online disagreement is demonstrated to have various positive influences on political behavior, broadly defined ([Ho & McLeod, 2008](#_ENREF_12); [Kittilson & Dalton, 2011](#_ENREF_23); [Min, 2007](#_ENREF_32); [Price & Cappella, 2002](#_ENREF_40)), though not on traditional political participation ([Min, 2007](#_ENREF_32)). We move forward with exploratory hypotheses that anticipate a positive relationship between online exposure to political disagreement and traditional political participation because mediated exposure to disagreement lacks substantial social pressures, and therefore should not deter political participation.

**H2:** Online Disagreement and Traditional Political Participation

**H2a:** Online *exposure* to political disagreement will predict higher levels of traditional political participation.

**H2b:** Online *engagement* with political disagreement will predict higher levels of traditional political participation.

Recent scholarship on the factors that predict political engagement in the online setting finds that exposure to cross-cutting political viewpoints online has no significant influence on levels of online political participation when compared to reinforcing information or information with no point of view ([Feezell, 2016](#_ENREF_9)). Relatedly, [Valenzuela, Kim, and Gil de Zúñiga (2012](#_ENREF_46)) find that exposure to political disagreement predicts lower levels of political participation in the online setting, but these authors do not distinguish between interpersonal and mediated disagreement. Overall, we know relatively little about how either exposure to political disagreement or engaging with it impacts online political participation, and we know even less about how this influences youth in particular. As a result, we construct similar hypotheses predicting online political participation as we did for traditional political participation.

**H3:** Interpersonal Disagreement and Online Political Participation

 **H3a:** Interpersonal *exposure* to political disagreement will predict lower levels of online political engagement.

 **H3b:** Interpersonal *engagement* with disagreement will predict lower levels of online political engagement.

**H4:** Online Disagreement and Online Political Participation

 **H4a:** Online *exposure* to political disagreement will predict higher levels of online political engagement.

 **H4b:** Online *engagement* with disagreement will predict higher levels of online political engagement.

**Methodology**

We use data from a unique survey of American youth conducted in 2011 called the Youth Participatory Politics Survey Project (YPPSP).[[2]](#footnote-2) The YPPSP provides a nationally representative sample of youth aged 15-25, and contains over 2,500 individual responses to a battery of questions about media consumption and political behavior. The survey sample was created using a combination of Knowledge Network’s KnowledgePanel® and address-based sampling from the U.S. Postal Service Delivery Sequence File. Survey administration was performed online and by telephone between February and July of 2011.

 *Dependent Variables*

The survey contains 19 “yes or no” questions that measure various forms of political participation undertaken within the past 12 months. Using an exploratory factor analysis (EFA) we constructed two indices constituting various forms of political participation that are consistent with the online and traditional categories of political participation and are labeled accordingly. Exploratory factor analysis is the most appropriate method when researchers suspect that a latent variable exists (or several such variables) but have no clear expectations about which groups of observed variables constitute it.

[Table 1 Here]

The list of political activities and whether each falls into online or traditional categories of participation based upon our EFA is provided in Table 1, along with overall rates of participation in a given activity for our sample.[[3]](#footnote-3) The first factor, “online,” loaded with six items that share the characteristic of taking place in an online setting. The second factor, “traditional,” loaded with seven items that, with the exception of online donations, do not take place online and constitute those types of participation traditionally associated with campaigns. Figure 1 and Figure 2 display the items and loading values for each factor. Cronbach’s alpha is also included in the figures; each value indicates a strong inter-item correlation (greater than 0.70) for the groups of activities.

[Figure 1 and Figure 2 Here]

Descriptive statistics are provided for the dependent variables in Table 2. The means and standard deviations for both variables indicate that respondents participate in online forms with greater frequency in our sample than they do in traditional forms, and that most respondents participate in fewer than three online or traditional activities.

[Table 2 Here]

*Independent Variables*

The focal independent variables in this study capture whether our respondents are *exposed* to disagreement in political conversations in two different settings: face-to-face and online.[[4]](#footnote-4) In separate questions, respondents are asked about face-to-face and online settings, “how often do you discuss politics with people who do not share your views?” The response options are “Never,” “Rarely,” “Sometimes,” or “Often.” For ease of interpretation, we collapse this ordinal scale into a binary variable in the models, placing individuals that responded “Never” or “Rarely” into the zero category, and those that said “Sometimes” or “Often” into the one category. Descriptive statistics provided in Table 2 reveal that 41% of our respondents engage in face-to-face political conversations with people with whom they disagree, and 30% of our respondents engage in online political conversations with people with whom they disagree.

Another set of focal independent variables captures whether our respondents are likely to *engage* with disagreement by responding to those with whom they disagree. We measure engaging with disagreement online and face-to-face with two similarly worded questions, “if you are online [face-to-face] and someone expresses a political view you disagree with, how often do you respond [speak up]?” The response options were “never,” “rarely,” “sometimes,” and “often.” We also collapse these four-category ordinal responses into a binary variable using the same rule as above. The descriptive statistics in Table 2 indicate that 62% of our sample is willing to respond face-to-face against those with whom they disagree, and that 55% of our sample is willing to respond online to those with whom they disagree.[[5]](#footnote-5)

The online environment presents a particular set of challenges regarding endogeneity for our data. One might argue that online political participation and exposure to and engagement with disagreement in online conversations are roughly equivalent, or that one is a component of the other. However, the online political activities we examine as the dependent variable ask individuals whether they *participate* via certain venues online (e.g. comment sections, blogs, social media sites), and not how their online interactions with other individuals could be characterized. The focus of the dependent variable is on individuals participating in a general sense, and not about the content of that participation. So, we argue that online political participation and conversations that involve exposure to or engagement with disagreement are related, but do not overlap sufficiently to be endogenous. We provide visuals in Appendix A that speak to this point. Figures A1 and A2 reveal that while there is likely a relationship between exposure and engagement with disagreement and the dependent variable, online political engagement, these variables are not perfectly – or even strongly – correlated.[[6]](#footnote-6)

In the models predicting online political participation, we include a control variable measuring general online capability. Studies show that digital media literacy, or the capacities related to digital media navigation and creation, predicts higher levels of online political participation ([Kahne, Lee, & Feezell, 2012](#_ENREF_18)); so just as we control for factors such as sex, age, and income that are known to predict traditional political participation, we also control for digital media literacy in the online setting. We expect that individuals more adept at operating in the online environment, whether passively taking in information or actively creating it, are more likely to engage in online political activities. The survey includes a battery of ordinal frequency scales capturing standard online activities; each question asks respondents to note the frequency with which they engage in various online activities on a five-point scale, from “Never” to “Daily.”[[7]](#footnote-7) We add respondents’ scores together for nine of these activities, and take the average of this amount as the “average online activity” measure in our models of online political participation. Descriptive statistics for this variable are also included in Table 2. While the trend is for the number of online political activities to increase on average as individuals engage in more online activity, there is enough covariation among these variables to dismiss concerns about endogeneity in the measures (See: Figure A3 in Appendix A).

The YPPSP survey provides us with a list of common control variables for models of political participation, including indicators for political ideology, political interest, age, race, education, socioeconomic status, and region. Descriptive statistics and descriptions of these variables are provided in Table 2.

The questions on the survey did not include direct measures of political party affiliation or political ideology. While having such measures would be preferable, at least for a sample of voting-age youth, we are able to control in some sense for both of these characteristics through the use of measures capturing the way that youth feel about political parties. The YPPSP includes feeling thermometers for the Democratic and Republican parties. Each of these questions asks respondents to rate their feelings toward each party on a scale of 0-100. Because we do not have specific expectations with regard to partisan identification and youth political participation, we use these two variables to construct a measure of the intensity of partisan identification. This variable is constructed by taking the absolute value of the difference between respondents’ scores on the Democrat and Republican thermometers, so values closer to 100 indicate more intense partisan association (See Table 2). We expect more intense partisan identification to have a positive relationship with political participation, whether online or traditional.

Political interest is an important factor to control for when predicting political participation. Presumably, youths interested in politics are more likely to engage in more political activities relative to those without any interest. The variable for political interest is a binary and created from an ordinal scale. Respondents were asked whether they strongly disagree, disagree, agree, or strongly agree with the statement: “I am interested in political issues.” For our indicator, respondents that choose “agree” or “strongly agree” are placed in the “1” category, indicating that they are interested in politics; respondents that disagree with the statement are coded “0.” The mean for this variable tells us that roughly half of our respondents have some interest in political issues.

Other standard controls are included as they are often shown to predict political participation. Age ranges from 15-25 years in our sample, with about 8-10% of the sample in each possible age value.[[8]](#footnote-8) Education ranges from 1-11, with each value indicating the highest stage of school completed. A value of “1” indicates that a respondent received an 8th grade education or less than this, while a value of “11” indicates that a respondent possesses a professional or doctorate degree. About 47 percent of our sample has either graduated high school or completed some college. The household income variable is a 19-point scale of income reported by the parent or guardian if the respondent is under 18, or by the respondent if he or she is legally an adult, and it accounts for income generated by all members of the household. Average income ranges between $35,000-$40,000, but respondents are evenly distributed across most income categories, with the top categories having fewer respondents than the lowest income brackets. The descriptive statistics in Table 2 also indicate that our sample is 56% female, 30% white, and 35% of respondents reside in a southern state.[[9]](#footnote-9) We include these variables as standard demographic controls for predicting political participation.

**Analysis**

We focus our interpretation primarily on the full sample of all respondents ages 15-25. However, for exploratory purposes we also include split-sample analyses of respondents who are above and below the voting age of 18 on the understanding that those eligible to vote may be more politically engaged. Our dependent variables are counts of the number of either traditional or online political activities a respondent participates in, and a special class of regression models is indicated to handle the discrete structure of ‘count’ data. A negative binomial regression model is the best fit for the particular distribution of our dependent variables. This model is similar to a Poisson model, but accounts for overdispersion of the data.[[10]](#footnote-10) For similarly constructed dependent variables, others have opted to scale the count and use ordered logistic regression (Krueger, 2002), but we believe this is inappropriate for the structure of our data.[[11]](#footnote-11)

The coefficients for negative binomial regressions are the expected changes in the logs of the counts of the participatory activities. Interpreting the coefficients in this form is not intuitive; therefore, we discuss the model results using exponentiated coefficients, which provide the estimated factor changes in the dependent variable for each one-unit change in an independent variable. These factor changes are also used to generate percentage changes via the following transformation: subtract one from the factor change, and multiply the new value by 100. We use both of these interpretations in the following discussion of the model results.

[Table 3 Here]

*(i) Traditional Participation Models*

Table 3 provides the coefficient estimates from our regression models for the dependent variable capturing traditional forms of participation. The coefficient for *exposure* to face-to-face political disagreement is not significant for the full sample or for those of voting age; however, it is significant and positive for those under 18. Compared to those who are not exposed to political disagreement, exposure to face-to-face disagreement increases participation in traditional political activities by *e*(0.754) or a factor of 2.13, which amounts to an increase of 113% on average. This influence may be driven by a larger, though still small, sample of individuals that participate in three-or-more traditional political activities and are exposed to disagreement, while there are fewer individuals without exposure to disagreement participating in higher numbers of traditional activities. H1a proposes that exposure to interpersonal disagreement and traditional political participation will be negatively related; we fail to reject the null hypothesis for H1a and surprisingly find that there is a positive relationship between these variables for those under 18. It appears that the social forces present in face-to-face political disagreement are not enough to deter traditional political participation among the full sample and may actually increase the likelihood of participation among ages 15-18.

 H1b proposes that *engaging* with people one disagrees with face-to-face will also predict lower levels of traditional political participation. We observe that there is no significant relationship between engaging with disagreement face-to-face and traditional political participation among youth for the full sample as well as for those over or under the voting age. We are unable to support H1b, and this runs contrary to previous findings that exposure and engagement decreases the probability of traditional political participation.

H2a proposes that *exposure* to online disagreement will predict higher levels of traditional political participation. For the full sample and individuals of voting age, exposure online to people with whom you disagree has a significant and positive effect on an individual’s expected count of traditional political activities. For the full sample, individuals exposed to disagreement online are expected to participate in more traditional forms of participation by a factor of 1.96, or a 96% increase relative to those individuals that are not exposed to these kinds of disagreement, all else equal. For individuals 18-and-over the influence increases slightly to a factor of 2.17, or a 117% increase in the average count of traditional political activities. We find that H2a is supported and there is a positive relationship between exposure to disagreement online and traditional political participation among youth generally, but especially those over age 18.

H2b proposes that *engaging* with people one disagrees with online will predict higher levels of traditional political participation. However, we observe that there is no significant relationship between engaging with disagreement online and traditional political participation. As a result, we are unable to support H2b and conclude that although exposure to political disagreement online has a positive relationship with traditional political participation, there is no statistical difference between those who choose to engage with disagreement and those who do not.

[Table 4 Here]

 *(ii) Online Participation Models*

Table 4 provides the estimates from the regression models for our dependent variable capturing online forms of political participation. Note that these models differ only in the inclusion of the variable capturing average online activity of respondents. The coefficients for *exposure* to face-to-face disagreement are positive across all models predicting online participation, providing evidence against hypothesis H3a. Furthermore, the coefficients are significant (p<.05) with roughly equivalent effects in both the full sample and age 18-and-over models; exposure to interpersonal disagreement increases the count of online political activities by a factor of 1.26 or by 26%. This is interesting in light of the results from Table 3, wherein exposure to interpersonal disagreement generated positive effects across all age groups, but only achieved significance in the model for ages 15-18. The relationship between face-to-face, or interpersonal, exposure to disagreement and the political participatory behavior of youth appears to differ from that between the same variable and their adult counterparts.

 H3b proposes that *engaging* with face-to-face disagreement will have a negative relationship with online political participation. While the coefficients for the full sample and across both age groups are negative and in the expected direction, none of these coefficients achieve statistical significance. There appears to be no relationship between engaging with face-to-face disagreement about politics and participating politically online and so we find no support for H3b.

Hypothesis H4a proposes that there will be a positive relationship between *exposure* to political disagreement online and online political participation. This hypothesis is supported among the full sample and among those of voting age. For the full sample, having conversations with those with whom you disagree online has a significant (p<0.05) and positive effect, increasing the expected count of online participatory activities by a factor of 1.27, or 27% relative to those individuals who do not or rarely engage in such conversations. This influence is similar in magnitude at a factor increase of 1.29, for individuals of voting age or older. Although the coefficient has a positive sign, for individuals under the age of 18 the relationship is insignificant, indicating that exposure to online disagreement has no effect on online participation for the younger individuals in our sample.

Hypothesis H4b anticipates a similarly positive relationship between *engaging* with disagreement online and online political participation. We observe that willingness to respond to those with whom you disagree in the online setting is significant (p<0.001) and positively related to online participation in the full model and for individuals 18-and-over. Individuals are expected to participate in 38% and 49% more online activities, or increase their number of activities by factors of 1.38 and 1.49 respectively in these models. These findings suggest that American youth who are exposed to political disagreement and engage with it in the online setting are more likely to be politically participatory online than those who are not exposed to political disagreement online.

From this analysis we observe that the online setting may provide a comfortable forum for youth to engage in political disagreement, and one that correlates with higher levels of political engagement rather than lower levels. Although there is a moment when exposure to face-to-face political disagreement predicts higher counts of traditional political participation (only among those under 18), this finding stands in contrast to the otherwise consistently positive relationship between exposure to online political disagreement and both traditional and online political participation. Political disagreement encountered and engaged with in the online and offline settings yields differential results in terms of the political participation of youth – online encounters with disagreement promote political participation generally, while face-to-face encounters have little influence.

*(iii) Control variables*

Several of our control variables warrant brief discussion. First, political interest has significant and positive coefficients for the full sample and 18-and-over models for both of our dependent variables. These coefficients translate to factor increases of 1.35 and 1.99, for the full sample models for online and traditional forms of participation respectively. In other words, individuals that report interest in politics are expected to participate in 35% more online activities on average and 99% more traditional political activities on average. Interestingly, the largest effect is on the level of traditional participation by youths under 18 years of age, for whom being interested in politics increases participation in traditional activities by 158% on average. For online political activities, however, there is no significant relationship between political interest and online participation for individuals under 18 years of age.

 The control variable for average online political activity, our proxy for digital media literacy, in the models for online political participation is significant and positive across all of these models. Our expectation was that this relationship would be positive and significant, as individuals with higher digital literacy are more likely to engage in more online political activities. The coefficients reveal that as the average frequency of online activity of our respondents increases, there is a corresponding factor increase in the count of online political activity ranging from 1.44 to 1.48, or a 44-48% increase in the count of online political activities. Tests for collinearity show no issue including this variable with our measures of exposure to and engagement with online disagreement, and Figure A3 in Appendix A demonstrates wide variation in the average online activity for individuals across different numbers of online political activities in which respondents participate.

Other control variables display some significant effects across models. Partisan intensity has a positive relationship with participation across all models. For traditional participation this effect is only significant in the full sample, but for online participation the effect is significant in all three models. However, the effect sizes are very small, reaching a maximum of 0.70% increase in the count online participatory activities for those under age 18. Education is positively and significantly related to online participation, in the full sample and 18 years and over models. With each increase in the highest level of education completed, an individual is expected to participate in 6% more online political activities in the full sample, and 8.43% more instrumental political activities for 18-and-over sample. Additionally, household income appears to matter for the extent of traditional participation for individuals less than 18 years of age. For this group, increasing household income by one category decreases traditional political participation by 15%. Age, education, and household income are correlated; however, we found no evidence of multicollinearity across our models.[[12]](#footnote-12)

**Discussion**

This project explores the relationship between political disagreement and political participation among youth. We develop this line of research by highlighting exposure to disagreement in different settings, offline and online, which are common among youth and involve different levels of social pressure. We operationalize encountering political disagreement using two measures: *exposure* to political disagreement and *engaging* with political disagreement in face-to-face and online settings. We examine the influence of political disagreement on traditional political participation and online political participation among American youth age 15-25.

 Disagreement that takes place in the online setting differs from disagreement in the offline setting in important ways. Online discussion can easily be made anonymous and is often asynchronous whereas interpersonal communication is rarely either. Whereas these qualities might make online discussions less respectful and unproductive, online discussion is actually found to be mostly civil and polite ([Papacharissi, 2004](#_ENREF_38)). Additionally, computer mediated communication often makes people more willing to express their opinion ([Ho & McLeod, 2008](#_ENREF_12)), which correlates with other research that shows online deliberation predicts increased political knowledge and sense of political efficacy ([Min, 2007](#_ENREF_32)). The online setting, therefore, might be a safe place compared to interpersonal settings for people to struggle with complex political arguments and reach conclusions that enhance, rather than suppress, political engagement. Disagreement in the interpersonal setting, by contrast, often involves social pressures that are believed to lead to lower levels of political engagement ([Mutz, 2002](#_ENREF_34)).

 In this study, we expected that interpersonal, face-to-face disagreement would have negative consequences for the traditional and online political participation of youth. On the other hand, we expected that online disagreement, absent many of the social forces believed to be responsible for suppressing political participation, will lead to higher levels of political participation among youth, both online and offline. Our findings largely support our expectations about online interactions and suggest that the online setting is a safe place for youth to encounter and engage with political disagreement in a way that facilitates - not hinders - political participation.

We find that there is most often no relationship between exposure to face-to-face political disagreement and traditional political participation among youth. The one exception that we observe is that face-to-face exposure to disagreement predicts higher traditional political participation among youth under the age of 18. This suggests that exposure to political disagreement in the interpersonal setting does not deter youth from engaging in traditional political activities – although it may not do much to promote it either. Additionally, engaging in face-to-face political disagreement has no significant relationship with online or traditional political participation. These findings are somewhat inconsistent with previous work by Mutz (2002), which finds interpersonal disagreement to predict lower levels of political participation, namely voting; however, we employ a sample of youth rather than the general population, and our dependent variable includes eight measures of political participation but not voting. Overall, it seems that the social pressures involved in interpersonal political disagreement do not negatively impact traditional forms of political participation among youth.

Our results also show that online exposure to political disagreement predicts higher levels of traditional and online political participation among youth. Additionally, engaging with political disagreement online predicts higher levels of online political participation. This suggests that people may feel safer, and perhaps emboldened, by disagreeing with others in the safety of the online setting, which they do not feel when disagreeing with others face-to-face. Moving political disagreement online may help to mitigate the social pressures that are believed to deter political engagement. By extension, youth who are raised in a digital era and more frequently encounter political disagreement in the online setting may experience a boon in political engagement that previous generations did not enjoy.

There are significant qualifications to this study that should be noted. First, it stands to reason that the relationship between engaging in disagreement online and online political participation is endogenous. In other words, although we show that exposure to and engaging with disagreement online predicts online political participation, it could also be said that online participation predicts exposure to and engagement with disagreement online. Perhaps then the same people that participate politically are just participatory people who are also open to engage in disagreement online. If this is the case, however, engaging in online participation should also predict interpersonal engagement with disagreement, and we find no evidence to support this. A similar endogeneity could be implied in the relationship between engaging in face-to-face disagreement and online political participation, however this relationship is not significant which lends some strength to the argument that it is engaging in online disagreement that predicts online political participation and not the other way around. Future studies should work to clarify the causal arrow in this relationship.

The second qualification to this study is that we rely on cross-sectional, self-reported survey data. The cross-sectional nature of these data make it difficult to conclude that the relationships we observe here are causal in nature. It is our understanding that there will be a second wave to the YPPSP survey that we anticipate using to better study causality among these relationships in the future. Finally, while self-reported data are subject to a host of problems in terms of internal validity, we argue that self-reported perception of disagreement is actually a benefit to this study for it is the perception that people disagree with you that engages social forces important to the study of political disagreement effects.

Despite the limitations of this study, we believe that it establishes a strong foundation on which to base future research. Moving forward scholars should focus on two facets that stand to bear interesting discoveries. First, it is possible that the observed relationship between online political disagreement and political engagement is partially a function of intermediary mechanisms such as promoting political knowledge, political interest, or sense of efficacy. Structural equation modeling or a panel design can help to highlight the specific mechanisms in play in this relationship. Secondly, youth who grow up in a digital age, where they are far more likely to encounter political disagreement in the online setting may exhibit higher levels of political engagement as a result. Scholars of political socialization and digital media should continue to study the consequences of online activity for youth and to follow these trends over time to illuminate whether and to what extent encountering online political disagreement during one’s formative years impacts political attitudes and behavior in adulthood.

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**Table 1. Online and Traditional Participation Constitutive Activities**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Participation** | **Activity**  | **Participation Rate (Mean)** |  |  **N** |
| *Online* | Comment on political news or blog  | 0.20 |  | 2886 |
|  | Contribute own political media | 0.07 |  | 2885 |
|  | Writing political blog entry or email  | 0.09 |  | 2889 |
|  | Share political art  | 0.21 |  | 2887 |
|  | Share political news | 0.18 |  | 2885 |
|  | Support on social network site  | 0.32 |  | 2899 |
| *Traditional* | Attending meeting, rally, speech, dinner | 0.10 |  | 2901 |
|  | Working on a campaign | 0.05 |  | 2881 |
|  | Raising or donating money (online) | 0.04 |  | 2892 |
|  | Raising or donating money | 0.05 |  | 2889 |
|  | Take part in protest, demonstration, sit-in | 0.06 |  | 2888 |
|  | Wear button, bumper sticker, sign in yard | 0.19 |  | 2898 |
|  | Participate in event to share political views | 0.11 |  | 2895 |

**Table 2. Descriptive Statistics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **Description** | **Mean** | **SD** | **Min** | **Max** |
| *Online* | Online participation index | 1.06 | 1.52 | 0 | 6 |
| *Traditional* | Traditional participation index | 0.60 | 1.19 | 0 | 7 |
| *Face-to-face disagree* | Binary: “Exposed to disagreement” = 1 | 0.41 | 0.49 | 0 | 1 |
| *Speak against* | Binary: “Speak up when you disagree” = 1 | 0.62 | 0.49 | 0 | 1 |
| *Online disagree* | Binary: “Exposed to disagreement” = 1 | 0.30 | 0.46 | 0 | 1 |
| *Online respond* | Binary: “Respond when you disagree” = 1 | 0.55 | 0.50 | 0 | 1  |
| *Average online time* | Continuous, Average of ordinal indices | 2.89 | 0.95 | 0 | 5 |
| *Partisan intensity* | |Rep. thermometer – Dem. thermometer| | 32.92 | 30.13 | 0 | 100 |
| *Political Interest* | Binary: “Interested” = 1 | 0.46 | 0.50 | 0 | 1 |
| *Age* | Self-reported age | 19.90 | 3.17 | 15 | 25 |
| *Education* | Highest degree received | 5.68 | 2.30 | 1 | 11 |
| *Household Income* | Scale ranging from <$5,000 to >$175,000 | 10.07 | 4.91 | 1 | 19 |
| *Female* | Binary: “Female” = 1 | 0.56 | 0.50 | 0 | 1 |
| *White* | Binary: “White” = 1 | 0.30 | 0.46 | 0 | 1 |
| *South* | Binary: “Reside in Southern State” = 1 | 0.35 | 0.48 | 0 | 1 |

**Table 3. Negative Binomial Regression Models, Traditional Scale of Participation**

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Traditional**(Ages 15-25)* |  *Traditional* *(Ages < 18)* |  *Traditional* *(Age >= 18)* |
|  |  |  |  |
| Face-to-Face exposure | 0.142 | 0.754\*\* | 0.004 |
|   | (0.177) | (0.326) | (0.190) |
| Online exposure  | 0.671\*\*\* | 0.031 | 0.776\*\*\* |
|  | (0.171) | (0.380) | (0.192) |
| Face-to-Face engagement  | 0.075 | -0.563 | 0.263 |
|  | (0.202) | (0.373) | (0.213) |
| Online engagement | -0.099 | -0.050 | 0.002 |
|  | (0.172) | (0.337) | (0.174) |
| Partisan intensity | 0.006\*\* | 0.007 | 0.004 |
|   | (0.003) | (0.006) | (0.003) |
| Political interest | 0.686\*\*\* | 0.946\*\* | 0.707\*\*\* |
|  | (0.173) | (0.391) | (0.188) |
| Age | -0.055 |  | -0.067 |
|  | (0.041) |  | (0.045) |
| Education | 0.049 | 0.078 | 0.058 |
|  | (0.053) | (0.074) | (0.066) |
| Household income | -0.036 | -0.139\*\*\* | -0.015 |
|  | (0.022) | (0.045) | (0.017) |
| Female | -0.001 | 0.207 | 0.001 |
|  | (0.161) | (0.338) | (0.158) |
| White | 0.015 | 0.319 | -0.169 |
|  | (0.182) | (0.365) | (0.153) |
| South | 0.074 | 0.514 | -0.019 |
|  | (0.162) | (0.322) | (0.181) |
| Constant | -0.003 | -0.192 | -0.018 |
|  | (0.944) | (0.687) | (0.919) |
| ln(alpha) | 0.233 | 0.124 | 0.125 |
|  | (0.177) | (0.341) | (0.200) |
|  |  |  |  |
| N |  1,112 | 269 | 843 |
| χ2 | 65.34 | 25.21 | 58.65 |
| Log-likelihood | -1,453.87 | -303.27 | -1,130.87 |

\* *p*<0.1; \*\* *p*<0.05; \*\*\* *p*<0.01

Values in parentheses are standard errors.

**Table 4. Negative Binomial Regression Models, Online Scale of Participation**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  *Online**(Ages 15-25)* |  *Online* *(Ages < 18)* |  *Online* *(Age >= 18)* |
|  |  |  |  |
| Face-to-Face exposure | 0.233\*\* | 0.323 | 0.235\*\* |
|   | (0.095) | (0.202) | (0.106) |
| Online exposure  | 0.240\*\* | 0.148 | 0.257\*\* |
|  | (0.100) | (0.231) | (0.109) |
| Face-to-Face engagement  | -0.144 | -0.096 | -0.150 |
|  | (0.107) | (0.255) | (0.114) |
| Online engagement | 0.326\*\*\* | 0.008 | 0.400\*\*\* |
|  | (0.099) | (0.220) | (0.105) |
| Partisan intensity | 0.004\*\*\* | 0.007\*\* | 0.004\*\* |
|   | (0.001) | (0.003) | (0.002) |
| Political interest | 0.297\*\*\* | -0.023 | 0.347\*\*\* |
|  | (0.098) | (0.214) | (0.109) |
| Age | -0.019 |  | -0.018 |
|  | (0.020) |  | (0.022) |
| Education | 0.059\*\* | -0.029 | 0.081\*\* |
|  | (0.028) | (0.053) | (0.035) |
| Household income | -0.009 | -0.023 | -0.007 |
|  | (0.011) | (0.034) | (0.010) |
| Female | 0.048 | 0.095 | 0.059 |
|  | (0.085) | (0.204) | (0.090) |
| White | 0.106 | -0.173 | 0.146 |
|  | (0.095) | (0.251) | (0.090) |
| South | 0.094 | 0.005 | 0.101 |
|  | (0.089) | (0.196) | (0.098) |
| Online activity | 0.389\*\*\* | 0.367\*\*\* | 0.392\*\*\* |
|  | (0.053) | (0.131) | (0.055) |
| Constant | -1.427\*\*\* | -0.796 | -1.750\*\*\* |
|  | (0.440) | (0.634) | (0.487) |
| ln(alpha) | -1.850\*\*\* | -1.564\*\* | -2.253\*\*\* |
|  | (0.395) | (0.711) | (0.605) |
|  |  |  |  |
| N | 1,112 | 269 | 843 |
| χ2 | 196 | 36.77 | 196.3 |
| Log-likelihood | -1,920 | -410.4 | -1,493 |

\* *p*<0.1; \*\* *p*<0.05; \*\*\* *p*<0.01

Values in parentheses are standard errors.

**Figure 1. Online Factor Items and Loading Values**

**Figure 2. Traditional Factor Items and Loading Values** 

**Appendix A.**

**Figure A1. Frequency distribution of Online Political Activities for Individuals that Are and Are Not *Exposed* to People Who Do Not Share Their Political Views**

**Figure A2. Frequency distribution of Online Political Activities for Individuals that Do and Do Not *Engage* In Political Disagreements**

**Figure A3. Box and Whiskers Plot of Average Online Activity across Counts of Online Political Activities.** Lines in boxes are median, box outlines 25th-75th percentiles, and lines with bars indicate most extreme values (not 95% confidence intervals), as 1.5 times the distance between values at 25th and 75th percentiles (e.g. upper whisker = X75% + 1.5(X75%-X25%)). Dots indicate values falling outside of this interval, which are considered “outliers” in this context.

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1. Lenhart, Amanda. (2015). Teens, Social Media & Technology. Pew Research Center. http://www.pewinternet.org/2015/04/09/teens-social-media-technology-2015/ . Accessed 3 March 2016. [↑](#footnote-ref-1)
2. Cathy J. Cohen and Joseph Kahne. 2011. "Youth Participatory Politics Survey." Oakland, CA: Youth and Participatory Politics Research Network. Dataset accessed May 1, 2014 at [http://ypp.dmlcentral.net/content/ypp-survey-project-2011-data](http://ypp.dmlcentral.net/content/ypp-survey-project-2011-data%22%20%5Ct%20%22_blank). [↑](#footnote-ref-2)
3. For the analysis, we use a *promax* rotation to account for the correlation of our variables. A scree test indicated the potential for two-to-four factors, so analyses requiring each number of factors were performed. Keeping only those items loading above 0.30 after rotation, the analysis with two factors was the cleanest, with no crossloadings and no factors without at least three items (Costello and Osborne 2005: 3). [↑](#footnote-ref-3)
4. Our sample includes only those individuals that engage in political conversations in both offline and online settings already. [↑](#footnote-ref-4)
5. The structure of the YPPSP allows respondents who reply “Never” or “Rarely” to either of the exposure to disagreement questions to provide a response to the comfort with disagreement questions. Thus, respondents who never or rarely engage in political conversations with people with whom they disagree, offline or online, may still respond that they would respond against a person they disagree with, if they were placed in that situation. [↑](#footnote-ref-5)
6. For exposure to disagreement ρ = 0.35; for engagement with disagreement ρ = 0.28. These correlations are roughly equivalent for the survey sample and our model samples. [↑](#footnote-ref-6)
7. The nine questions included in the measure are: how often respondents (1) send messages, share status updates, or chat online or (2) share links or forward information or media through social network services like Twitter or Facebook; (3) look online for news, information, or media related to their interests; (4) participate in an online forum or group related to their interests; (5) post, link to, or forward information or media related to their interests; (6) use the Internet to organize an online group, discussion, or website; (7) participate in a game community, guild, competition, etc.; (8) create their own media to share online, like blogging, fiction, podcasts, music, videos, art, or games; and (9) post a comment, review, or critique of someone else’s media online. [↑](#footnote-ref-7)
8. Age is excluded from the models for the under 18 years of age group due to potential collinearity problems with education level. However, the results presented in Table 3 and 4 are robust to the inclusion of education. [↑](#footnote-ref-8)
9. The relatively low percentage of white respondents, and the relatively high percentage of Southern respondents are due to a combination of oversampling on various factors. Texas and Florida were heavily oversampled in the early period of constructing the Knowledge Networks panel. Minority communities were also oversampled. Post-stratification weights are applied in our models to account for these and other major issues with sample representativeness. [↑](#footnote-ref-9)
10. Overdispersion, when a distribution has a larger variance than its average value, is common for measures of social phenomena. The dispersion parameter indicated that the negative binomial regression was preferred in most of our models, and in those where this was unclear, the Poisson and negative binomial regression estimates were compared, but no important differences occurred. [↑](#footnote-ref-10)
11. We also perform a series of ordered logistic regressions, but the composition of the scale matters for the significance and sign of our coefficients. This unpredictability led us to prefer count models, which allow us to test for our relationships without performing transformations of the dependent variables. Given the large number of zeroes in our models, we also considered zero-inflated negative binomial regressions, but two distinct processes do not generate the zeroes, as such models assume. As a robustness check, we performed zero-inflated regressions, and the relationships are not different from those in tables 3 and 4. [↑](#footnote-ref-11)
12. Variance inflation factor (VIF) tests did not indicate an issue with collinearity for any of the variables or combinations thereof. As a robustness check, we run iterations of the models with all potential combinations of age, education, and income across our samples for both dependent variables. The effects presented in Table 3 and Table 4 are robust to all of these specifications, with only occasional shifts in the significance of some variables (none go higher than p<.05, however). [↑](#footnote-ref-12)