

Personality Traits and Social Network Disagreement

Cameron D. Anderson

Laura B. Stephenson

Department of Political Science

University of Western Ontario

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Abstract:

In this paper, we consider the extent to which personality traits moderate the effect of political disagreement in social networks on political engagement. We draw upon literatures that detail the influence of conflict in social networks on political engagement and the political implications of personality traits. We use data from a 2013 national Canadian survey to explore this topic in detail across two different types of disagreement and several measures of political engagement. We find evidence that different types of disagreement have divergent effects on engagement and that personality does moderate these effects of disagreement in social networks but that the results are inconsistent.

People are social beings who operate in and understand the world, in part, through their interactions with others. Over several decades, a large and diverse body of research has detailed the importance of social networks (Huckfeldt and Sprague 1987; Huckfeldt 1984; Huckfeldt, Plutzer and Sprague 1993; Huckfeldt et al. 1995; Zuckerman and Kroh 2006; Zuckerman, Valentino and Zuckerman 1994; Zuckerman, Dasović and Fitzgerald 2007), as well as the role of political disagreement or conflict (Mutz 2002, 2006; Fitzgerald and Curtis 2012; McClurg 2006a, b), for political engagement. Recently, political science researchers have augmented this knowledge by considering the effects of individual-level personality traits. The ‘Big Five’ personality measures (emotional stability, openness, conscientiousness, extraversion and agreeableness) have been found to relate to discussion in social networks (Mondak et al. 2010; Gerber et al. 2012b; Mondak 2010; Gallego and Oberski, 2012) and political behaviours such as partisanship (Gerber et al. 2012a), turnout (Mondak et al. 2010), and political engagement more generally (Mondak and Halperin 2008; Mondak et al. 2010). Thus, understanding one’s political activities requires that researchers pay attention to personality as a key foundation.

The objective of this paper is to evaluate whether personality moderates the effect of disagreement in social networks on political behaviour. We know that personality shapes some aspects of social network experiences (Caspi et al. 2005), and we build upon existing literature by testing whether personality traits also affect how individuals react to contrary discussion in their networks. Is there evidence of this secondary effect, and if so, which personality traits are implicated? We explore these topics using data from a 2013 national survey of Canadians.

Theoretical Motivations

The theoretical starting point for this paper comes in the form of two observations. First, one’s personality affects political attitudes, beliefs, behaviours and experiences. Second, one’s social environment, defined as interactions and experiences with friends, family and the broader community, can have a profound impact on one’s political attitudes, beliefs and behaviours. Our task in this paper is to probe the effects of the interaction between one’s social environment and one’s personality. In particular, we

want to focus on how one's personality moderates the political implications of perceiving or experiencing disagreement in a social network.

Personality researchers have identified a set of traits known as the 'Big Five': emotional stability, openness, conscientiousness, extraversion and agreeableness. John and Srivastava (1999: 121) provide the following definitions:

Briefly, Extraversion implies an *energetic approach* toward the social and material world and includes traits such as sociability, activity, assertiveness, and positive emotionality. Agreeableness contrasts a *prosocial and communal orientation* toward others with antagonism and includes traits such as altruism, tender-mindedness, trust, and modesty. Conscientiousness describes *socially prescribed impulse control* that facilitates task- and goal-directed behavior, such as thinking before acting, delaying gratification, following norms and rules, and planning, organizing, and prioritizing tasks. Neuroticism contrasts emotional stability and even-temperedness with *negative emotionality*, such as feeling anxious, nervous, sad, and tense. Finally, Openness to Experience (versus closed-mindedness) describes the breadth, depth, originality, and complexity of an individual's *mental and experiential life*. (Italics in original)

In non-political environments, these traits have been shown to influence academic performance (e.g. Borg and Shapiro 1996), health and income (Goodwin and Friedman 2006; Borghans et al. 2008).

Recent studies have demonstrated that personality traits also have important implications for political behaviours and attitudes (e.g. Blais and Labbé St-Vincent 2011; Gallego and Oberski 2012; Gerber et al. 2010, 2012a, b; Mondak and Halperin 2008; Mondak et al. 2010). In particular, Mondak et al. (2010: Table 2, p. 94) show that openness, conscientiousness, extraversion and emotional stability are all related to at least some political behaviours that indicate engagement, such as turnout (openness, emotional stability), working for a party (openness, conscientiousness and extraversion) and displaying yard signs, bumper stickers or campaign buttons (openness). Other work indicates that conscientiousness is associated with being ideologically conservative and openness is affiliated with liberalism (see, for example, Gerber et al. 2010), and extraversion and agreeableness increase the likelihood of a partisan identity while openness weakens the incidence of partisanship (Gerber et al. 2012a). Additional work by Blais and Labbé St-Vincent (2011) and Gallego and Oberski (2012) suggests that the effects of personality on turnout are largely indirect and are mediated by specific

attitudinal correlates. For instance, Gallego and Oberski find that the effect of conscientiousness on electoral turnout is mediated by civic duty.

We are not the first to apply the insight that political behaviour and attitudes are affected by personality traits to the realm of social networks. Researchers have shown that personality traits are related to political experiences. For example, researchers have found that openness and extraversion are related to the size of networks (Mondak et al. 2010) as well as political discussion (Mondak and Halperin 2008). Network size is negatively affected by conscientiousness and emotional stability (Mondak et al. 2010), but conscientiousness can have a positive effect on discussion (Mondak and Halperin 2008). Hibbing, Ritchie and Anderson (2011) investigate the influence of personality traits on the context of political discussion. Focusing on local politics, their work builds upon earlier studies by teasing out how personality shapes one's social circles. They find evidence that certain traits are related to discussion in specific locations. In particular, conscientiousness increases discussion in neighbourhoods, clubs, and families; extraversion increases discussion in formal settings like clubs, churches, and the workplace; openness increases discussion among friends; and, emotional stability is related to discussion with casual acquaintances and those who hold different views. These findings are important because they demonstrate that personality traits have implications for several aspects of one's political life.

We want to extend the existing literature by probing how personality conditions the effects of disagreement in one's social network. In so doing, we build upon two aspects of the social network literature. First, we know that social networks can influence political behaviour. For example, Zuckerman and colleagues demonstrate the effect on sustaining partisan allegiances (1998, 2006, 2007); Buton, Lemerrier and Mariot (2012: 445) find household effects on turnout; and Huckfeldt and his colleagues document effects for political attitudes and behaviours (Huckfeldt 1984; Huckfeldt and Sprague 1991; Huckfeldt, Plutzer and Sprague 1993; Huckfeldt et al. 1995; Lake and Huckfeldt 1998). Knoke (1990) finds that the nature of one's network, including the frequency of political discussion and partisan composition, has implications for political participation.

Second, we know that not all social networks are equal. Some have homogenous views and some are mixed. The findings for the effects of political diversity in one's

social context are also mixed. One set of findings broadly suggests that political participation is increased when the broad social context is politically heterogeneous. In these contexts, heterogeneity can encourage political engagement (such as turnout) as diverse views contribute to political competition, which in turn contributes to close elections (Cox and Munger 1989; Blais 2000). Scheufele et al. (2004) argue that political learning and hard news media use are mechanisms by which network disagreement increases individual-level political engagement, and demonstrate both direct and indirect effects of heterogeneity. Harell, Stolle and Quintelier (2009) find that political diversity promotes participation among young people, which they theorize is related to an increase in political knowledge, interest and discussion that comes from having a diverse social context.

The second set of findings indicates that political disagreement or conflict within interpersonal networks can undermine political engagement (Eveland and Hively 2009; McClurg 2006a; Mutz 2002, 2006; Hopmann 2012; but see Bello 2012). Two mechanisms are suggested to account for this influence. The first is ‘ambivalence’ – the notion that when people are ambivalent about politics and perceive conflicting views within their social network, they are less likely to engage politically (Mutz 2002, 2006). The second posited mechanism is one of ‘social accountability’ or ‘conflict avoidance’ (Conover, Searing and Crewe 2002; Mutz 2002, 2006). In this view, political engagement is related to a person’s desire to avoid conflict and alienating members of one’s social network, such that when conflict or disagreement exists, political engagement will be lower. As Mutz (2006, p. 100) explains, “Declaring one’s self partisan in a politically mixed setting puts one in a position to potentially alienate others. Doing the same in a homogeneous environment does not incur these same risks.”

More recently, researchers have argued that the negative effects of social network disagreement are conditional on the distribution of beliefs in a network. McClurg (2006a) finds that one’s social position (membership in the minority or majority) conditions how exposure to political disagreement influences political activity. Nir (2011) finds evidence of nonlinear effects, as disagreement in oppositional networks (those in which network members are in conflict with the respondent) demobilizes political engagement while disagreement in mixed networks, where there is competition

between different viewpoints but the respondent has at least some support, tend to be related to political activity. Bello (2012) also finds evidence of a nonlinear pattern, such that only universal disagreement undermines engagement significantly. However, Eveland and Hively (2009) show that those who experience both “safe” and “dangerous” discussion (with like-minded and opposing partisans) are less likely to participate.

The literature also suggests that the type of disagreement may matter for its influence. Klobstad, Sokhey and McClurg (2013) make a distinction between ‘partisan disagreement’ (building on the conceptualization of Huckfeldt, Johnson and Sprague (2004)) and ‘general disagreement’ (building on the conceptualization of Mutz (2006)). They find that both types of disagreement, when significant, undermine engagement, but there are inconsistencies depending on the type of disagreement and type of political engagement.

Finally, there is some recent evidence that personality traits can moderate the links between social networks, discussion, disagreement and political engagement. For example, Mondak et al. (2010) show that the effect of network size on exposure to disagreement is moderated by personality, such that it is higher for extroverts and those low in agreeableness. Hibbing et al. (2011) demonstrate that openness increases the effect of discussant influence on political attitudes (in their case, toward Bush). Gerber et al. (2012b) find that the positive effect of topic agreement on the frequency of discussion is weaker for those who are extroverted and emotionally stable, who also are less likely to report wanting to avoid sensitive topics. Thus, existing evidence suggests that personality has direct effects on political behaviours and social networks, as well as important secondary effects that should be considered.

(Figure 1 about here)

In this paper, we wish to push this literature further by explicitly considering how different personality traits moderate the effects of disagreement on political engagement. We see this as exploring yet another way that personality affects the broad relationship between social networks and political attitudes and behaviours. For clarity, Figure 1 indicates our understanding of the relationships between personality, social networks, disagreement and political engagement. The red arrow highlights the relationship we are focusing on in this paper. Instead of a direct effect on behaviour, an indirect effect

through the type of network one experiences, or a moderation of the effect of discussion in general, we focus on how personality affects the impact of network disagreement on political engagement.

The Scope of this Study: Social Network Disagreement and Personality

Our study is consistent with the model put forward in Mondak et al. (2010) and other research in psychology that argues “personality differences shape people’s reactions to the behavior of their partners” (Caspi, Roberts and Shiner 2005:472). For example, we know that the frequency of political discussion with family members is less sensitive to disagreement for extraverts and those who are emotionally stable, while being more open increases discussion with agreeing non-family members (Gerber et al. 2012b). But we are interested in whether personality moderates the effect of disagreement on political engagement. The posited mechanism for negative effects relies on the importance of social accountability and avoiding conflict. If disagreement is to have a negative effect on one’s political engagement, it is expected to occur because of a desire to avoid confrontation with others. We believe that not everyone equally holds that desire, and that one’s personality will underlie the importance of social accountability. Thus, one’s personality should condition the effects of experiencing disagreement in a social network, in addition to its effects on the frequency of discussion.

Our expectations are bolstered by work that considers variation in how individuals approach conflict. Antonioni (1998) provides evidence that extraversion, openness and conscientiousness can be negatively related to conflict avoidance, while agreeableness and neuroticism can be positively related.¹ Further, Elliott and Thrash (2002) find that extraversion is related to an approach temperament (meaning the individual has a predisposition toward positive stimuli), while neuroticism is related to an avoidance temperament (a predisposition to avoid negative stimuli). However, Testa et al. (2014) provide somewhat conflicting evidence, in that disagreement slightly increases the likelihood of non-voting political participation for all orientations toward conflict, both positive and negative. Thus, we believe that more work needs to be done to better

¹ These results summarize the findings across two different samples of participants, students and managers.

² The propensity weight is designed to correct for the likelihood of answering non-probability online surveys compared to probability telephone surveys. The explanation provided in the

understand the role of personality in how individuals internalize disagreement within their social networks.

Our expectations for how personality may condition the effects of disagreement build upon work regarding conflict avoidance as well as the insights of Gerber et al. (2012b). We expect that, in general, extraversion, openness and conscientiousness will lead to a positive effect of disagreement on political engagement because people with these traits will not seek to avoid conflict. On the other hand, neuroticism and agreeableness are likely to contribute to a negative effect of disagreement.

However, we are mindful that the literature on social networks and political engagement has revealed many nuanced effects, as noted above. The nature of disagreement can matter and each type of engagement may not be affected the same way. Accordingly, we test for the moderating effect of personality in different disagreement-engagement configurations.

First, we explore two types of disagreement – open and perceived – as each may affect citizens differently. On the one hand, political disagreement may be the result of actual discussion and debate within one's network. Differences of opinion may arise through conversation when network members choose to discuss politics and express political differences. This open form of disagreement may facilitate a competitive dynamic between network members that does not deter participation, as articulated by Nir (2011). At the same time, a more passive or implicit form of network disagreement may be present. Reporting the existence of network disagreement may be the result of perceiving different political opinions within one's network rather than engaging in explicit disagreement. This more passive form of disagreement may facilitate ambivalence and concern over social accountability that leads to less political engagement, along the lines of the arguments put forward by Mutz (2002, 2006). Although the active and passive forms of disagreement have been amalgamated in some previous measures of disagreement (e.g., Mutz 2002), in this paper we separate them to consider their unique and potentially divergent effects on political engagement. We think that perceived disagreement is likely to have a demobilizing effect on engagement for the reasons of social accountability and conflict avoidance noted by Mutz (2002). However, we also suspect that open disagreement will be motivating for many individuals in the

ways found by the literature. We are curious whether disaggregating disagreement will shed light on the divergent results found in the literature. Is it the case that “open conflict” measures of disagreement show mobilizing effects? Does perceived disagreement recreate demobilizing effects on political engagement because of social accountability?

Combining these insights with our expectations for the effects of personality, we expect to see greater differentiation between individuals due to their orientations toward conflict. This means we expect to see heightened demobilization due to perceived disagreement among those who are conflict avoidant (those high on agreeableness and neuroticism). Among those who enjoy conflict (extraverts, those who are open to new experiences, and those high on conscientiousness), we expect to see heightened mobilization when open disagreement is experienced.

Second, we consider different forms of political engagement, as there are many ways that people may get involved with the political world. There is evidence that social environments affect both individual-based and group-based behavior and social activities (Kenny 1992; Leighley 1990), but work by Pattie and Johnston (2009) suggests that the type of political activity being considered may lead to a difference in the effects of disagreement. Further, Quintelier, Stolle and Harell (2012: 871) suggest a distinction between party-based activities and more general political behaviour. They propose that activities that separate individuals along party lines are the ones for which negative effects of heterogeneity have been found. To probe this type of variation, we consider three different measures of political engagement: voting, campaign (partisan) activity and online political activity.

Data and Methods

We utilize data collected from a 2013 survey of Canadians to investigate our hypotheses. Using the Harris-Decima online panel of Canadians, 2620 respondents completed the survey between February 1 and February 26. The survey asked questions about political discussion within various forms of social networks, conflict within those social networks, personality, and forms of political engagement. The survey was designed to be nationally representative of region, gender and language in Canada and

included an oversample of youth (30 and under). All analyses in this paper are conducted using demographic (age, region and gender) and propensity² weights.

Our dependent variables are three measures of political engagement. The first is turnout to vote. The survey asked respondents ‘how often do you vote in elections? (regularly, sometimes, rarely, never, don’t know, prefer not to say)’. Responses were coded into regularly and sometimes (=1) versus all other options (=0).

The second measure covers partisan campaign activity. We asked how often respondents ‘gave money to candidates or parties; attended campaign rallies; displayed a campaign yard sign; or worked for a candidate or party during a campaign? (regularly, sometimes, rarely, never, don’t know, prefer not to say)’. Responses were coded into ‘regularly’ and ‘sometimes’ (=1) versus all other options (=0) for each type of campaign activity. We then created an index of these partisan campaign activities by adding these variables together.³

The final dependent variable is comprised of two forms of digital engagement. Respondents were asked ‘how often they left comments on political blogs or online news articles’ and ‘how often they use social media (including Twitter and Facebook) to comment about politics, including ‘liking’ and joining groups’? (regularly, sometimes, rarely, never, don’t know, prefer not to say)’. Responses were coded into ‘regularly’ and ‘sometimes’ (=1) versus all other options (=0) for each type of online activity. These two measures were then combined into an index of ‘online political engagement’.⁴

Our analysis focuses on disagreement in one’s political network. The survey included a discussant generator battery that began by asking, “Can you give me the FIRST names of the three people you talked with most about politics during the past year? These people might be from your family, from your neighbourhood, from work, from church, from some other organization you belong to, or they might be from

² The propensity weight is designed to correct for the likelihood of answering non-probability online surveys compared to probability telephone surveys. The explanation provided in the Technical Report for the survey is as follows: “This technique is relied upon to adjust for self-selection bias and to reduce or eliminate the potential learning effects associated with participating in multiple online surveys.”

³ The scale reliability coefficient for the party campaign index is 0.78.

⁴ The scale reliability coefficient for the online index is 0.71.

somewhere else.” Respondents were then asked questions about each person they identified individually.

Our measure of perceived disagreement reflects whether the respondent feels that members of their identified discussion network “share or oppose” most of their views on political issues (share; oppose; neither oppose nor share; don’t know; prefer not to say). We code this variable -1 for share and +1 for oppose. Our measure of open disagreement is more direct, probing how often there is disagreement when discussing politics. The question asked: “When discussing politics with person A/B/C, how often do you disagree about politics?” (never, rarely, sometimes, often, don’t know, prefer not to say). We code this variable 0 to 3 for increasing levels of disagreement.

We use aggregate measures of perceived and open disagreement for each individual, weighting each amount of disagreement by the amount of political discussion that is held with each discussion partner. We do this to recognize that having a lot of disagreement with individuals that are rarely spoken to should produce a less pronounced effect on engagement compared to a respondent who has a lot of disagreement in their network and regularly discusses politics with those network members. Thus, we create weighted disagreement scores for each discussion partner by multiplying the reported disagreement by the reported amount of political discussion with the same network member. Our measure of political discussion comes from a question that asked respondents how often they talk about politics with the individuals identified in the network generator (never, only once in a while, fairly often, very often, don’t know, prefer not to say). We then create an index of disagreement for each respondent comprised of the discussion-weighted disagreement of the three network members. We follow this procedure for both perceived and open disagreement. While we fully recognize that each of these measures are subjective and dependent upon the respondent’s own recollections, we follow Mutz (2002: 842, fn 7) in asserting that perceptions may actually be the most important when assessing influences on individuals.

We used the ten-item personality index (TIPI) to classify respondents on each of the Big Five personality traits: openness, conscientiousness, emotional stability, extraversion and agreeableness (see Gosling, Rentfrow and Swann 2003 for a discussion of the index). In the survey, ten questions were asked with seven-point scales, ranging

from “disagree strongly” to “agree strongly”. We combined the appropriate pairs of questions to create the five personality measures.⁵ These are the same measures used by Gerber et al. (2010, 2012a, b).

Analyses and Results

We present three results tables that sequentially work through consideration of the central questions of this paper. Table 1 presents baseline effects of perceived and open disagreement and personality on the three types of political engagement (turnout, partisan campaign activity and online political engagement). Table 2 explores the effects of perceived disagreement and any interactive effects of personality with this form of disagreement on political engagement. Table 3 does the same with open disagreement. All models control for age, gender and education. Additionally, all turnout models include a control for respondents’ position on whether turning out to vote is a duty or a choice (Blais 2000).

(Table 1 about here)

Table 1 presents a set of baseline effects to establish how forms of disagreement and personality impact the likelihood of political engagement. These models include both types of agreement in order to consider their effects in concert. Controlling for duty to vote, Models 1 and 2 show no independent effects of either form of disagreement or of personality traits on intention to vote. For partisan campaign activity and online political engagement, more consistent results emerge. Models 3 and 5 both reveal the expected effects of the forms of disagreement. Perceived disagreement has a negative effect on the likelihood of campaign activity and online involvement. By contrast, open disagreement has a positive or mobilizing effect on these forms of engagement. These results confirm our expectations about the divergent effects of different forms of network disagreement on political engagement.

The results for personality are contained in Models 4 and 6 of Table 1. For both of these forms of engagement, three personality traits emerge as having significant effects and these effects are consistent across both models. Extraversion has positive and

⁵ See [http://homepage.psy.utexas.edu/homepage/faculty/gosling/scales_we.htm#Ten Item Personality Measure \(TIPI\)](http://homepage.psy.utexas.edu/homepage/faculty/gosling/scales_we.htm#Ten Item Personality Measure (TIPI)) for more information about the measure and coding.

significant effects on the likelihood of participating in campaign activity and online forms of political engagement. Similarly, respondents scoring higher on the openness personality trait were more likely to be involved in these forms of political engagement. Both of these results are sensible and expected in that the outward orientation of these personality traits lend themselves quite directly to forms of political engagement. Finally, results from these models show that conscientiousness is negatively related to political engagement. This result is unexpected given the known relationship of conscientiousness and conflict avoidance, but we suspect it may indicate that the ‘thinking before acting’ tendencies of conscientious people undermines the willingness or ability to engage politically in these ways. As such, we think it reflects more about how one’s personality relates to political engagement than reactions to disagreement, and as such is consistent with some of the findings in Gerber et al. (2012b) that show conscientious individuals engage in political discussion with family members less frequently. It should also be noted that the previously discussed effects of perceived and open disagreement remain even with the addition of personality traits to the model. Interestingly, we see no effect of agreeableness or emotional stability, despite our expectations given the extant literature.

(Table 2 about here)

Table 2 presents a more detailed consideration of the effects of perceived disagreement on political engagement. Models 1-3 of Table 2 convey the same set of substantive conclusions regarding the impacts of perceived disagreement and personality on turnout – when controlling for duty to vote, disagreement and personality traits have no independent effect. The results are different for the remaining models that look at the dependent variables of partisan campaign activity and online political engagement. Results in models 4 and 5 confirm our earlier findings – perceived disagreement weakens the likelihood of this form of engagement. Consistent with earlier findings, results in model 5 reveal that extraversion and openness increase the likelihood of campaign activity while conscientiousness weakens the chances of participating in this form of political engagement.

Model 6 includes the interactions of personality with perceived disagreement, the heart of our investigation in this paper. There are a couple of points to highlight. The

first is that there is only one significant interaction of personality traits with perceived disagreement. Results show that the interaction of openness and perceived disagreement has a positive and significant effect on campaign activity. The interaction of openness with perceived disagreement *reverses* the baseline direction of this form of disagreement on engagement. This result would seem to suggest that more open individuals respond differently to perceived network disagreement than individuals who are less open to new experiences. Beyond this, the result may also suggest that open personality types are motivated to engage politically by perceived disagreement, in stark contrast to less open personality types. Although we only hypothesized that the effects of disagreement would be heightened for those with compatible personality traits, this finding is in keeping with the expectation that those who score higher on openness are more likely to engage politically. This result clearly suggests an important moderating effect of personality on the effects of perceived disagreement.

The final set of models (7-9) in Table 2 considers forms of online political engagement. Consistent with earlier findings, perceived disagreement has a negative effect on the incidence of engaging politically in this way (model 7) and this is true when including the effects of personality (model 8). Similar to partisan campaign activity, we find that extraversion and openness are positively associated with the incidence of online political engagement while conscientiousness is negatively related. These are expected results. There is only one significant interaction term in model 9 – that of extraversion with perceived disagreement. The coefficient for this interaction term is positive and suggests that for extraverts, perceived disagreement actually motivates online political engagement in the same way that this form of disagreement does with openness and campaign activity. This result suggests that extraverts are mobilized to engage by perceived disagreement in ways that are opposite to what is experienced by introverts. Again, while this effect was not expected, it is consistent with our understanding of how personality affects political engagement. Also of note, in model 9, the base coefficient for perceived disagreement loses statistical significance – perhaps suggesting that the negative effects of perceived disagreement disappear when considering how perceived disagreement interacts with personality. In sum, these results again suggest the effects of perceived disagreement on engagement can be substantively moderated by personality.

(Table 3 about here)

Table 3 contains an expanded set of results exploring the effects of open disagreement on political engagement. Results from models 1 and 2 indicate that views on duty to vote soak up any additional explanatory effects of open disagreement and personality traits on political engagement. That said, model 3 shows that while all of the personality interactions are insignificant, more open disagreement and conscientiousness have a positive or mobilizing effect on turnout. This may be evidence that turnout decisions can be explained by more than just attitudes about duty but that these effects only materialize through consideration of the moderating effects of personality on open disagreement.

Models 4-6 suggest that open disagreement has a mobilizing effect on partisan campaign activity – this is consistent with earlier findings from Table 1. Likewise, model 5's results suggest that extraversion and openness are positively related to partisan campaign activity while conscientiousness is not. Interestingly, the results from model 6 suggest no moderating effects of personality on open disagreement. Personality influences whether people engage politically, but not how open disagreement affects behaviour. The last set of models considers online engagement. Results for models 7 and 8 confirm earlier findings – open disagreement, extraversion and openness have mobilizing effects on the likelihood of online political engagement while conscientiousness has a negative effect. Model 9 reveals no significant coefficients among the personality-open disagreement interaction terms. However, the coefficient size for open disagreement in model 9 is substantively higher than in models 7 and 8. While there are no significant moderating effects of personality on open disagreement, this result may suggest that controlling for those interactions increases the substantive mobilizing effects of open disagreement on online political engagement.

Discussion and Conclusion

Our findings suggest that the effect of discussion network disagreement on political engagement is conditional on both the type of disagreement and individual level personality traits. In the first instance, a central contribution of this paper is to theorize and demonstrate the divergent effects of different forms of disagreement. In particular,

we believe that what we call ‘perceived disagreement’ and ‘open disagreement’ are distinct forms of disagreement and are internalized differently. Our results confirm this expectation by finding that perceived disagreement consistently undermines political engagement while open disagreement motivates political engagement. We suggest that this finding is important because it helps to provide context for conflicting results of political disagreement found elsewhere – while Mutz (2002, 2006) argues that network disagreement is demobilizing, others find that such disagreement mobilizes political engagement.

A second contribution of the present work is the observation that personality influences how disagreement is internalized. While we see that personality in and of itself has an influence on the likelihood of political engagement, personality traits also have some interactive effects with perceived disagreement on political engagement. In particular, the depressing effect of perceived disagreement can be weaker for those who are open or extraverted (depending on the type of engagement). These findings help us to better understand how and why network disagreement influences forms of political engagement.

Thus, we see the contribution of this paper as further evidence that personality matters for political behaviour. Not only does it affect engagement and discussion, but it can also moderate the effect of social network disagreement on political engagement. We think that these findings are exceptionally useful when thinking about the role of social network influences on political attitudes and behaviour more generally.

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Figure 1. Mapping the Relationships between Personality, Social Networks, Disagreement and Political Engagement

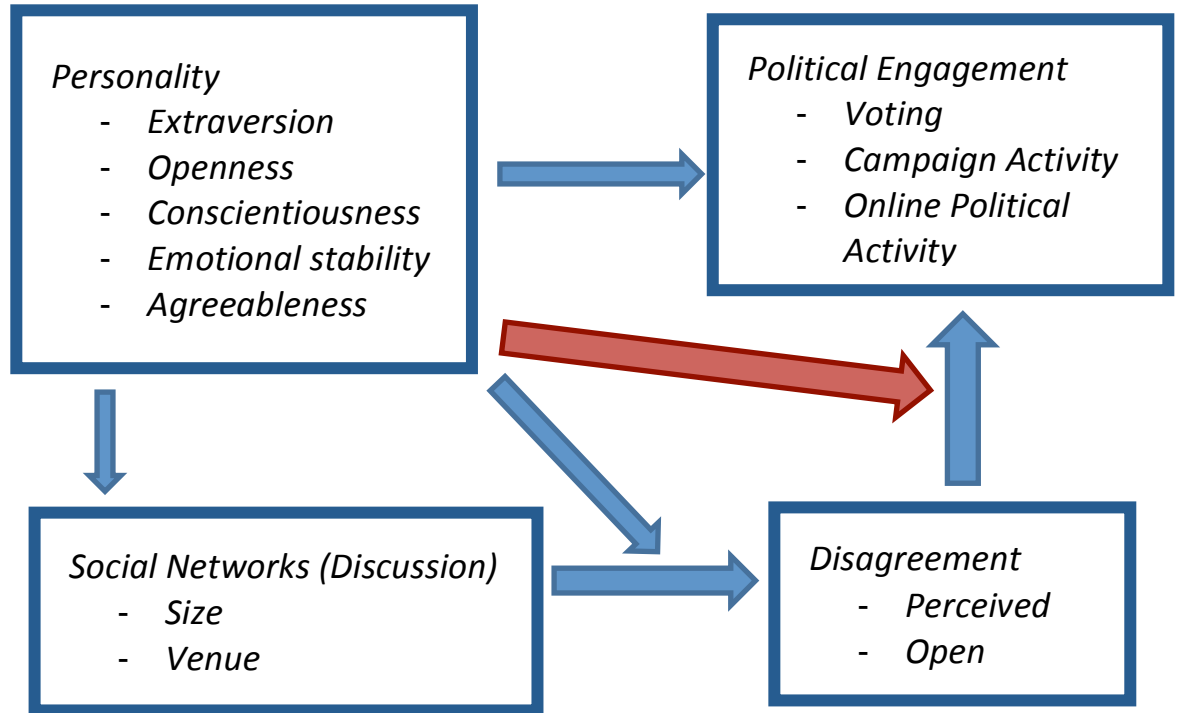


Table 1 Disagreement, Personality and Political Engagement – Baseline Models

	Turnout		Campaign Activity		Online Political Activity	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age	0.81***	0.73***	0.04***	0.04***	-0.12***	-0.12***
	0.18	0.18	0.01	0.01	0.01	0.01
Female	-0.45+	-0.49+	-0.03*	-0.04*	-0.06***	-0.06***
	0.26	0.28	0.02	0.02	0.02	0.02
University Education	0.65*	0.73*	0.05**	0.05**	0.02	0.03
	0.28	0.29	0.02	0.02	0.02	0.02
Duty	2.13***	2.14***				
	0.3	0.3				
Perceived Disagreement	0.02	0.06	-0.05***	-0.05***	-0.04***	-0.04***
	0.15	0.15	0.01	0.01	0.01	0.01
Open Disagreement	0.13	0.14	0.04***	0.03***	0.04***	0.04***
	0.1	0.1	0.01	0.01	0.01	0.01
Extraversion		0.05		0.02***		0.01*
		0.09		0.01		0.01
Conscientiousness		0.17		-0.02*		-0.03***
		0.12		0.01		0.01
Agreeableness		0.11		0		0
		0.12		0.01		0.01
Emotional Stability		-0.07		0.01		0
		0.11		0.01		0.01
Openness		0.12		0.01+		0.03***
		0.13		0.01		0.01
Constant	0.16	-1.29+	-0.02	-0.10*	0.34***	0.33***
	0.42	0.78	0.03	0.05	0.03	0.06
Observations	1509	1481	1621	1584	1621	1584
Pseudo R-squared	0.198	0.207	0.09	0.10	0.11	0.13
Standard errors in second row						
Note: + p<0.10, * p<0.05, ** p<0.01, *** p<0.001						

Table 2. Perceived Disagreement, Personality and Political Engagement

	Turnout			Campaign Activity			Online Political Activity		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Age	0.88***	0.80***	0.78***	0.05***	0.05***	0.05***	-0.11***	-0.11***	-0.11***
	0.17	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01
Female	-0.52*	-0.55*	-0.58*	-0.04**	-0.05**	-0.04**	-0.07***	-0.07***	-0.07***
	0.26	0.27	0.28	0.02	0.02	0.02	0.02	0.02	0.02
University Education	0.72**	0.81**	0.84**	0.06***	0.06***	0.06***	0.04*	0.04*	0.04*
	0.27	0.29	0.29	0.02	0.02	0.02	0.02	0.02	0.02
Duty	2.20***	2.18***	2.20***						
	0.29	0.3	0.3						
Perceived Disagreement	-0.01	0.03	0.4	-0.06***	-0.06***	-0.14**	-0.05***	-0.05***	-0.04
	0.15	0.14	0.66	0.01	0.01	0.05	0.01	0.01	0.05
Extraversion		0.07	0.19		0.02***	0.03***		0.02**	0.03***
		0.09	0.12		0.01	0.01		0.01	0.01
Conscientiousness		0.15	0.17		-0.02*	-0.02*		-0.03***	-0.04***
		0.12	0.15		0.01	0.01		0.01	0.01
Agreeableness		0.12	0.07		0	0.01		0	-0.01
		0.12	0.16		0.01	0.01		0.01	0.01
Emotional Stability		-0.06	-0.04		0	0		0	0.01
		0.11	0.13		0.01	0.01		0.01	0.01
Openness		0.12	-0.06		0.02*	0.03**		0.03***	0.03*
		0.13	0.17		0.01	0.01		0.01	0.01
Extraversion* Perceived Disagreement			0.17			0.01			0.01*
			0.11			0.01			0.01
Agreeableness* Perceived Disagreement			-0.06			0.01			-0.01
			0.13			0.01			0.01

Conscientiousness*			0.03			0			0
Perceived Disagreement			0.13			0.01			0.01
Emotional Stability*			0.02			-0.01			0.01
Perceived Disagreement			0.14			0.01			0.01
Openness*			-0.22			0.02*			-0.01
Perceived Disagreement			0.15			0.01			0.01
Constant	0.31	-1.17	-0.73	0.06*	-0.04	-0.11+	0.42***	0.37***	0.39***
	0.37	0.73	0.88	0.03	0.05	0.06	0.03	0.05	0.07
Observations	1565	1533	1533	1664	1626	1626	1664	1626	1626
Pseudo R-squared	0.204	0.212	0.22	0.05	0.08	0.08	0.08	0.11	0.11
Standard errors in second row									
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001									

Table 3. Open Disagreement, Personality and Political Engagement

	Turnout			Campaign Activity			Online Political Activity		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Age	0.80***	0.73***	0.73***	0.04***	0.04***	0.04***	-0.12***	-0.12***	-0.12***
	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01
Female	-0.45+	-0.49+	-0.51+	-0.03*	-0.04*	-0.04*	-0.06***	-0.06***	-0.06***
	0.26	0.28	0.28	0.02	0.02	0.02	0.02	0.02	0.02
University Education	0.64*	0.72*	0.79**	0.05***	0.06***	0.06***	0.03+	0.03+	0.03+
	0.28	0.29	0.29	0.02	0.02	0.02	0.02	0.02	0.02
Duty	2.13***	2.13***	2.17***						
	0.3	0.3	0.3						
Open Disagreement	0.13	0.14	1.04*	0.04***	0.04***	0.06*	0.05***	0.04***	0.13***
	0.1	0.1	0.53	0.01	0.01	0.03	0.01	0.01	0.03
Extraversion		0.05	0.04		0.02***	0.01		0.01*	0.03*
		0.09	0.19		0.01	0.01		0.01	0.01
Conscientiousness		0.17	0.46+		-0.01+	0		-0.03**	0
		0.12	0.24		0.01	0.01		0.01	0.02
Agreeableness		0.11	0.31		0	0.01		0	0.01
		0.12	0.24		0.01	0.01		0.01	0.02
Emotional Stability		-0.07	-0.05		0	0		0	0
		0.11	0.21		0.01	0.01		0.01	0.02
Openness		0.11	0.13		0.01*	0.03*		0.03***	0.04*
		0.13	0.27		0.01	0.02		0.01	0.02
Extraversion* Open Disagreement			0.01			0.01			0
			0.07			0			0
Agreeableness* Open Disagreement			-0.08			0			0
			0.09			0			0.01

Conscientiousness*			-0.12			0			-0.01
Open Disagreement			0.09			0			0.01
Emotional Stability*			-0.02			0			0
Open Disagreement			0.08			0			0.01
Openness*			-0.01			-0.01			0
Open Disagreement			0.1			0.01			0.01
Constant	0.15	-1.29+	-3.44*	0	-0.09+	-0.14	0.37***	0.33***	0.09
	0.41	0.78	1.38	0.03	0.05	0.09	0.03	0.06	0.1
Observations	1509	1481	1481	1621	1584	1584	1621	1584	1584
Pseudo R-squared	0.198	0.206	0.215	0.07	0.08	0.08	0.10	0.12	0.12
Standard errors in second row									
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001									