Personalities Discussing Politics:
The Effects of Agreement and Expertise on Discussion Frequency and the Moderating Role of Personality Traits

HYUNJIN SONG
HAJO G. BOOMGAARDEN
University of Vienna, Austria

Research suggests that individuals' personality traits are uniquely related to the patterns of their social interactions. This study addresses whether and how personality traits condition the social interaction patterns when people discuss politics in their immediate social environment. We explore the interactive relationship between discussion partners' personality traits, disagreement, and expertise when they discuss the economy and immigration. Combining a multilevel approach with a propensity score analysis, this examination of a nationally representative sample of Austrian citizens finds that, although political agreement may motivate individuals to frequently discuss politics, not all citizens are equally affected by expertise, nor is such influence identical for different discussion topics.

Keywords: political discussion, discussion frequency, political agreement, political expertise, personality traits, multilevel analysis, propensity score analysis

Citizens' informal political discussion is a central feature of contemporary democracy and the critical instrument by which democratic principles are realized. Decades of research reveal that the extent of agreement and disagreement in one's political discussion may affect various democratic outcomes (Eveland & Hively, 2009; Eveland, Song, & Beck, 2015; Schmitt-Beck & Lup, 2013). The literature, however, appears to suggest that individuals' needs for political agreement and their search for political expertise in their networks often collide. Discussion partners who are knowledgeable do not necessarily share similar points of view, and those who share similar viewpoints are not necessarily knowledgeable. This raises the interesting question of how disagreement and expertise may condition the influence of each partner.

The current study contributes to the literature in several important ways: First, it focuses on expertise (Huckfeldt, 2001; McClurg, 2006) and (dis)agreement (Eveland & Hively, 2009; Mutz, 2002), situating these factors within Pavitt's (2010) conceptualization of cognitive consistency and understanding as the two fundamental underpinnings of human communication behaviors (also see Holbert, Weeks, & Esralew, 2013). Based on these premises, we test whether citizens' discussions about

Hyunjin Song: hyunjin.song@univie.ac.at
Hajo Boomgaarden: hajo.boomgaarden@univie.ac.at

politics are uniquely affected by such different motivational underpinnings. Second, whereas previous research has considered political discussion as a fairly general, single construct, we distinguish two broad domains of political discussion: economic and immigration topics, two issues that prominently structure political conflict (Kriesi et al., 2012). Third, we consider the possible conditional role of personality traits by probing whether and how different personality traits affect citizens' motivations to discuss politics (Gerber, Huber, Doherty, & Dowling, 2012; Hibbing, Ritchie, & Anderson, 2011; Lyons, Sokhey, McClurg, & Seib, 2016; Mondak, 2010). By investigating this possibility, we explore whether every citizen is equally affected by the social supply of expertise and exposure to heterogeneous political perspectives within his or her discussion networks.

Two Motivational Drivers of Political Discussion: (Dis)agreement and Expertise

From the perspective of cognitive consistency (Pavitt, 2010; also see Holbert et al., 2013), individuals tend to directionally process relevant information; Kunda (1990) refers to this as a "directional" need. Defined as a set of "needs to uphold and maintain a desirable conclusion and reject disconfirming information" (Nir, 2011, p. 506), directional goals propel individuals to favor supportive evidence in light of their preexisting attitudes and opinions (Kunda, 1990; Taber & Lodge, 2006). Therefore, to satisfy their directional needs, and all else equal, in political discussion, individuals prefer like-minded others (who provide supportive evidence), and they avoid discussions with people with whom they disagree. Consistent with this perspective, research on political discussion mostly confirms that the presence of political agreement not only structures the selection of discussion partners but also directly increases the frequency of political discussion (Eveland et al., 2015; Frimer, Skitka, & Motyl, 2017; Gerber et al., 2012).

Another theoretical angle for investigating the motivational underpinning of political discussion is the principle of understanding (Pavitt, 2010). Although people are "motivated to make sense of the world around them" (Holbert et al., 2013, p. 1665), they may desire to accurately perceive and evaluate relevant information regardless of its consistency. When motivated by such accuracy needs, citizens invest more effort in seeking and evaluating relevant information (Kunda, 1990; Taber & Lodge, 2006), and, in the same vein, when seeking political information, they are expected to turn to those who are more knowledgeable about and interested in politics (McClurg, 2006). Because such delegation can reduce information costs associated with being informed (Downs, 1957), political expertise is regarded as an important selection criterion for political interactions (Huckfeldt, Pietryka, & Reilly, 2014; McClurg, 2006). We therefore begin with two baseline expectations that we use to confirm prior theoretical assumptions and empirical evidence:

H1:   Political disagreement will be associated with lower discussion frequency.

H2:   Political expertise will be associated with higher discussion frequency.

In addition to their independent effects, research suggests that the influences of these two antecedents may be intertwined. When available, individuals will strongly prefer discussion partners who are well informed and share the same political preferences (Ahn, Huckfeldt, Mayer, & Ryan, 2013;

Huckfeldt, Pietryka, & Reilly, 2014; Pietryka, 2016). Under such a scenario, relying on better-informed copartisan discussants can satisfy one's consistency and accuracy needs (Downs, 1957; Huckfeldt et al., 2014; Pietryka, 2016). Therefore, we should observe that the interchange of political information is maximized within a politically homogeneous dyad, especially with more knowledgeable and informed discussion partners. Yet political disagreement between such partners would have more far-reaching inhibitory consequences than it would between people who are less knowledgeable and not as well informed. Therefore, we predict the following hypothesis:

H3:   *The negative (positive) impact of disagreement (agreement) will be more pronounced with discussion partners who have more political expertise.*[1]

As argued by Ahn and colleagues (2013), however, one's ability to talk only with highly knowledgeable and informed copartisan partners depends on factors outside one's control and therefore is often contextually limited. Despite the possibility that people can glean information from like-minded political experts, in reality, such socially supplied political expertise is neither readily available nor equally distributed to every citizen (e.g., Djupe & Sokhey, 2014). In contrast, studies consistently document that exposure to political disagreement is common and widespread (Huckfeldt, 2001; Huckfeldt et al., 2014). Voters, therefore, often face situations in which they are "forced to choose between these two criteria" (Pietryka, 2016, p. 368). This raises the interesting question of how disagreement and expertise may condition a person's influence in the presence of possible knowledgeable discussion partners who do not share the same political preferences. For instance, Sokhey and McClurg (2012) find that voters tend to give less weight to political knowledge than to shared preferences, while Ahn et al.'s (2013) and Huckfeldt's (2001) results offer contrasting findings. Although one experiment (e.g., Pietryka, 2016) suggests that the patterns of preferences between political agreement and political expertise may depend on an individual's specific motivations, it is not clear whether such empirical patterns observed in the experiment are replicable outside of an experimental context. A real-world political discussion is not likely to be explicitly instrumental (i.e., seeking "correct" decisions); nor are people forced to interact with strangers where there is no further expectation of a long-term relationship.

We explore here the possibility of whether stable individual differences, such as personality factors, consistently condition the way that individuals navigate their political environments. Research has consistently demonstrated that the so-called Big Five personality traits (John, Naumann, & Soto, 2008; McCrae & Costa, 1997)—extroversion, openness to experience, agreeableness, conscientiousness, and neuroticism or emotional stability—represent a reliable indication of how individuals orient themselves toward the outside world (Mondak, 2010; Mondak & Halperin, 2008). Moreover, many studies suggest that exposure to political disagreement (e.g., Gerber et al., 2012; Hibbing et al., 2011) and one's political expertise (i.e., interest and knowledge; e.g., Mondak, 2010) are all uniquely related to different facets of one's personality. Exploring the possible links among personality, disagreement,

---

[1] This also implies, as the symmetries-in-interaction effect states, that the positive impact of expertise will be more pronounced when the discussants share similar political views.

and expertise helps us understand why individuals behave differently in the intersection of disagreement and expertise.

Relationship Between Disagreement, Expertise, and Personality Traits

Political Disagreement and Personality Traits

Many studies have focused on the relationship between the Big Five and exposure to disagreement (Gerber et al., 2012; Hibbing et al., 2011; Mondak & Halperin, 2008). For instance, those who score high in extroversion, which refers to an "energetic approach toward the social and material world" (John et al., 2008, p. 138), are more opinionated (Costa & McCrae, 1980) and more outgoing (Mondak & Halperin, 2008) and therefore are less likely to be influenced by disagreement (Gerber et al., 2012; Hibbing et al., 2011). In contrast, people who score high in agreeableness—those who are "co-operative, sympathetic and altruistic" (Mondak & Halperin, 2008, p. 346)—are more likely to be repelled by disagreement (Gerber, Huber, Doherty, & Dowling, 2011). Agreeableness is positively correlated with prosocial orientation (John et al., 2008) and negatively associated with hostility and noncompliance (Costa & McCrae, 1980). Therefore, it makes sense that those who are more "eager to cooperate" (Gerber et al., 2012) are less likely to discuss politics with social contacts with whom they disagree due to their intrinsic affinity to avoid conflicts (Mondak, 2010; Mondak & Halperin, 2008).

Similarly, some studies predict that people who are neurotic (i.e., less emotionally stable) are more likely to be affected by disagreement. Evidence suggests that neurotic individuals are more sensitive to social rejection (Gerber, Huber, Doherty, & Dowling, 2011; Hibbing et al., 2011). Therefore, those who score high on neuroticism are less likely to discuss politics—especially if they disagree with their social contact (Mondak & Halperin, 2008).

Conscientiousness refers to the degree to which individuals comply with "socially prescribed impulse control that facilitates task- and goal-directed behavior" (John et al., 2008, p. 138). Although research suggests no clear expectation for its direct main effect on discussion frequency, highly conscientiousness (i.e., disciplined and ordered) people are often less likely to be repelled by disagreement and are therefore more capable of discussing politics with people they disagree with (Hibbing et al., 2011).

Finally, openness to experience indicates "the degree to which a person needs intellectual stimulation, change, and variety" (Costa & McCrae, 1992, p. 9). However, current research does not provide a clear expectation for how openness moderates the relationship between agreement and the frequency of discussion.

Summing up, we expect that, as the level of disagreement increases, people who are more extroverted (H4a), less neurotic (H4b), less agreeable (H4c), and more conscientious (H4d) will be less averse to disagreement and therefore relatively more likely to discuss politics than people who score lower on the same traits.

Political Expertise and Personality Traits

Although clear theoretical assumptions exist for the relationship between disagreement and the Big Five personality traits, the theoretical and empirical link between the Big Five and expertise is less clear. At best, we find a suggestive link between individual differences in cognitive processing with the Big Five personality traits, in that openness and conscientiousness positively predict systematic processing and attention to argument quality, while neuroticism is negatively related to such tendencies (e.g., Jost & Krochik, 2014). This implies that, given a preference for more accurate information over directional information, an individual is likely prefer more politically knowledgeable and informed discussion partners who can provide such information (e.g., Ahn et al., 2013; Downs, 1957; Pietryka, 2016). Yet despite such evidence, research provides no strong basis to firmly hypothesize the moderating impact of the Big Five traits on the relationship between expertise and the frequency of political discussion.

Studies suggest, as we have predicted, that the negative (positive) impact of political disagreement (agreement) will be more pronounced with discussion partners who have more political expertise (per H3). Also, we expect that less extroverted (per H4a), more neurotic (per H4b), more agreeable (per H4c), and less conscientious (per H4d) individuals will be more averse to—and therefore more responsive to—potential disagreement. Extending this logic, we tentatively predict that only among less extroverted, more neurotic, more agreeable, and less conscientious individuals, the effect of disagreement will be even more pronounced when such disagreement is paired with more discussion partners who have more expertise. This additionally implies that the effect of disagreement with discussion partners with lower expertise may not be as inhibiting as it would be with discussion partners who have higher expertise—consistent with the notion that the effect of expertise (and therefore the effect of accuracy needs) often works in the opposite direction of disagreement and directional needs (Kunda, 1990; McClurg, 2006).

Although our intuition suggests that some personality traits will either amplify or dampen the interactive relationship between disagreement and expertise, it remains to be seen whether and how such patterns will appear in a typical political discussion context outside a laboratory setting. Therefore, we ask the following explorative question:

RQ1: *How do the Big Five personality traits condition the interactive relationship between political disagreement and expertise in predicting discussion frequency?*

Topical Differences and Their Relationship With Personality

Our final consideration in assessing the impact of personality traits in political discussions concerns the topics being discussed. Research suggests that those who hold more expansive definitions of politics report having more discussions than others (Fitzgerald, 2013; Morey & Eveland, 2016), and people's conceptualizations of politics often depend substantially on how respondents perceive different degrees of conflict in various domains of public affairs (Fitzgerald, 2013). From a theoretical standpoint, then, political discussions involving conflict-laden topics—such as recent immigration issues—would register more effects in disagreement than safer, relatively less controversial topics such as the economy. Given the expected interactive relationship among disagreement, expertise, and personality

factors, we may also expect a differing degree of disagreement and its effect based on the nature of the discussion topics. Therefore, we ask:

RQ2:   How do the interactive relationships between the Big Five personality traits, political disagreement, and expertise differ across different topics of political discussion?

Method

The study relies on a nationally representative online survey in Austria that was conducted between November 2016 and January 2017 (*N* = 721). The survey was conducted and administered by Statistics Austria under the commission of the University of Vienna Platform for Survey Research, Methods and Empirical Analysis. Based on a central population register, the survey used multistage stratified random sampling of key demographics to draw a total of 3,632 participants, of which 721 participated (response rate of 16.4%). The demographic characteristics of the sample closely resemble the profile of the general population of Austria for gender (sample = 51% women; population = 51% female), age (sample *M* = 42.99, *Mdn* = 44; population *Mdn* = 40–44 years), and net household income (sample *M* = €2,100–2,250; population *M* = €2,158). The sample is bit higher in terms of education (*Mdn* = high school diploma) than the general population (*Mdn* = intermediate technical and vocational schools). All reported population characteristics are from 2015 labor market statistics provided by the Federal Bureau of Statistics Austria.

Measures

Political Discussion

Following the standard egocentric name-generator approach adapted from the 2008–2009 American National Election Studies (ANES), respondents (hereafter denoted as "egos") were asked to report their typical political discussion frequency with their social contacts.[2] Excluding nonrespondents and those who report no discussion frequency, respondents were asked to provide the names of up to three people with whom they regularly discuss politics (hereafter denoted as "alters"). Participants were then asked, "How many times, if ever, have you had a discussion or serious conversation of five minutes or more" on economic and immigration topics with each of your named alters over the last month.[3] We probed the frequency of discussion about each of the topics separately, based on the expectation that respondents' perceptions of the degree of conflict in different domains will affect the discussion

---

[2] Specifically, we presented the following probe: "Now, we'd like to know if you've talked about politics or political issues lately with, for example, family members, friends, acquaintances, or colleagues at work. How many times have you had a discussion or talk about politics/political issues in the past month?" The five response options ranged from 1 (*no discussion at all*) to 5 (*very often*).

[3] We prompted respondents to consider topics such as interest rates, unemployment, and rising prices for the economy topic, and the refugee crisis, increasing number of asylum seekers, and border controls for the immigration topic.

frequency in such domains (Fitzgerald, 2013). Responses to this question were measured on a 5-point scale ranging from 1 (*not at all*) to 5 (*very often*).

Next, respondents were asked about the two topics separately: "How often do you agree with the political standpoints" of each of the alters. Again, responses were measured with a 5-point scale ranging from 1 (*never*) to 5 (*very often*). The scale was later reversed so that higher scores represent greater disagreement. Last, respondents were asked how knowledgeable each of their alters are about politics—again separately for economic and immigration topics—based on a 5-point scale ranging from 1 (*not at all*) to 5 (*very much*).[4] The basic descriptive statistics of these discussion-related variables are shown in Panel A of Table 1.

Table 1. Key Descriptive Statistics.

Panel A. Descriptive statistics for discussion variables (standard deviations in parentheses)		
	Economy	Immigration
First alter		
Frequency	3.24 (1.10)	3.69 (1.08)
Agreement	3.98 (0.78)	4.09 (0.91)
Expertise	3.63 (0.89)	3.64 (0.85)
Second alter		
Frequency	3.00 (1.05)	3.47 (1.07)
Agreement	3.83 (0.82)	3.87 (1.02)
Expertise	3.51 (0.93)	3.51 (0.82)
Third alter		
Frequency	3.07 (1.09)	3.38 (1.13)
Agreement	3.87 (0.84)	3.90 (0.95)
Expertise	3.55 (0.92)	3.52 (0.82)

---

[4] To prevent respondents from retrospectively anchoring their responses about discussion frequency based on (dis)agreement with, or the expertise of, their alters, we asked about discussion frequency before the agreement and expertise questions, assuming that simple frequency does not (or is, at least, less likely to) systematically alter the perception of agreement and expertise. Research suggests that attitude agreement strongly influences political discussion (Gerber et al., 2012) but not vice versa (Goel, Mason, & Watts, 2010).

Panel B. Bivariate correlations between the Big Five personality measures (N = 721)					
	Extroversion	Agreeableness	Conscientiousness	Neuroticism	Openness
Extroversion	1.00				
Agreeableness	0.41***	1.00			
Conscientiousness	0.10**	0.09*	1.00		
Neuroticism	0.09*	−0.02	−0.19***	1.00	
Openness	0.25***	0.33***	0.03	−0.09*	1.00

Note: *** p < .001, ** p < . 01, * p < .05.

Big Five Personality Traits

        The Big Five personality traits were measured using the Mini-IPIP scale (Donnellan, Oswald, Baird, & Lucas, 2006), with four items measuring each of the Big Five traits.[5] Respondents were asked to indicate how accurately certain adjectives (e.g., "talkative," "original, comes up with new ideas") describe their personality on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The internal consistency of each subscale yielded an acceptable reliability (extroversion M = 3.06, SD = 0.79, Cronbach's α = .74; agreeableness M = 3.72, SD = 0.71, α = .68; openness to experience M = 3.66, SD = 0.76, α = .65; conscientiousness M = 3.87, SD = 0.68, α = .64; neuroticism M = 2.70, SD = 0.73, α = .59).[6] Correlations among the Big Five traits are reported in Panel B of Table 1.

Control Variables

        First, we control for the ego's overall network size (M = 2.53, SD = 0.86, range 0–3, measured by the number of an ego's named alters). Next, as a proxy for political interest, we measure a respondent's news media attention to the discussion topics (economy M = 3.33, SD = 1.06; immigration M = 3.71, SD = 1.02) based on a 5-point scale ranging from 1 (*very little*) to 5 (*very much*). Respondents' weekly exposure to newspapers (M = 3.26, SD = 1.52) and political websites (M = 2.97, SD = 1.57) was also measured on a 5-point scale ranging from 1 (*every day*) to 5 (*never*). Scales were later recoded so that higher values represent more media exposure. Last, we control for these demographic characteristics for respondents and discussants: gender (40% women, coded as 1); education (M = 3.39, SD = 1.36, ranging from 1 (*finished compulsory/still in school*) to 5

---

[5] Despite its brevity, the shorter scale of the Big Five personality traits is shown to be reliable and has acceptable psychometric properties (Baldasaro, Shanahan, & Bauer, 2013; Donnellan et al., 2006). The Mini-IPIP scale tend to be highly correlated with the longer version of the scale (with higher internal consistency), exhibit similar patterns of external correlates, and high convergence validity.

[6] The shorter scale of Big Five (such as the TIPI or the Mini-IPIP) tend to have lower reliability, yet this is expected since trait terms in each of the dimensions tap several different constructs (see Baldasaro et al., 2013).

(*university/other higher degree*); employment (61% full-time, coded as 1); and household income (*M* = 13.04, *SD* = 5.99), ranging from 1 (*no income*) to 20 (*€3,900 or more*).

Analysis Strategy: Generalized Propensity Score Analysis

To reduce possible selection bias and produce more robust estimates, we employ a propensity score weighting procedure (Fong, Hazlett, & Imai, 2018). The general purpose of this procedure is to produce data such that two groups differ only in their "treatment" or "assignment" status (based on a variable of interest) but are equal in all other observed covariates (Rosenbaum & Rubin, 1983). Because the propensity score has a similar balancing property as can be found in random assignments in an experimental framework, it is expected that outcome analysis using propensity score weighting can yield more robust estimates in the absence of experimental data (Rosenbaum & Rubin, 1983). For the current application, we employ the covariate balancing propensity score methodology proposed by Imai and Ratkovic (2014). This approach, which directly optimizes sample covariate balance rather than relying on predicting the conditional probability of treatment assignment, is found to be much more robust against potential misspecification of the propensity score model than alternatives (Imai & Ratkovic, 2014; Wyss et al., 2014). Also, a recent extension for a continuous treatment regime—the covariate balancing generalized propensity score, or the CBGPS (Fong et al., 2018)—allows for circumvention of the artificial dichotomization of our continuous treatment variables.

Because we have two continuous treatment variables (disagreement and expertise) for two discussion topics (the economy and immigration), a total of four CBGPS models were estimated. The pretreatment covariates in these CBGPS models include: each of the Big Five personality traits, the alter's gender, and the respondent's network size, media attention to topics of discussion, newspaper exposure, political website exposure, and sociodemographic controls described above. In addition, responses about each alter are nested within each respective ego, and we specify the random effect model in estimating respective propensity score models, which provides a more robust result against potential misspecification of the propensity score model when such clustering is ignored (Arpino & Mealli, 2011).

Given two separately estimated CBGPS weights for disagreement and expertise, we opted to derive the joint weights (by multiplying the two CBGPS weights and then normalize the sum to 1) to estimate the joint marginal effects of disagreement and expertise in a single model specification. In all the cases, the resulting CBGPS weights substantially improved the covariate balance, as shown in Figure 1.

Figure 1 depicts the degree of covariate balance between the treatment variable (disagreement or expertise, depending on models) and pretreatment covariates in unweighted data (each upper panel) and in weighted data (each lower panel). The covariate imbalance ranged from as large as 0.13 (the economy) to 0.19 (immigration) before weighting, whereas the largest imbalance after weighting was reduced to 0.09 (immigration), with the average imbalance from 0.01 to 0.03. Research suggests that absolute Pearson correlations that do not exceed 0.1 demonstrate an adequate level of covariate balance in continuous treatment cases (Zhu, Coffman, & Ghosh, 2015).[7]

---

[7] Supporting information, including additional descriptive statistics and results, can be found at http://osf.io/qgnhe.

We use a nonparametric bootstrap resampling technique (N = 5,000) for obtaining 95% percent confidence intervals of estimated continuous treatment effects, while accounting for the uncertainties of choosing CBGPS weights. That is, we randomly resample the original data (with replacements at a cluster level, respecting the hierarchical nature of the data), and for each of the bootstrapping resamples, we estimate four CBGPS models, derive joint weights (one for each discussion topic), and estimate the outcome models predicting discussion frequency with such weights. Regardless of the model specifications, we model discussion frequency on economic and immigration topics as a function of disagreement and expertise treatments, Big Five personalities, and their interaction terms (including three-way interaction among disagreement, expertise, and each of the Big Five traits) and a set of control variables. Because observations are nested under each ego, we also used random effect mixed models in fitting outcome regressions.
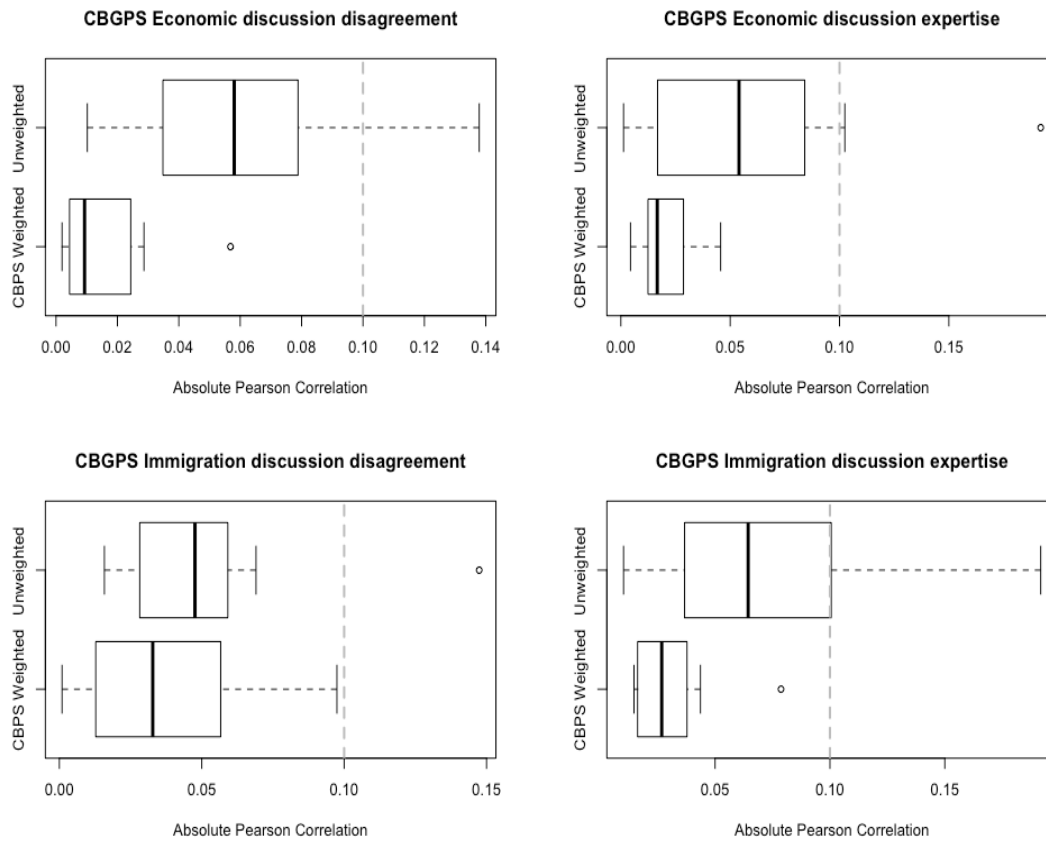
Figure 1. Covariate balance before and after the weighting using CBGPS.

Results

Table 2 reports multilevel regression models (using post-CBGPS weights) estimating the frequency of discussions on the economy, and Table 3 reports the same model specifications predicting the frequency of discussions on immigration. In all tables, we report an unconditional model (i.e., main effects of disagreement and expertise), two-way interactions between disagreement and expertise, and three-way interactions with each of the Big Five traits. All models control for the egos' network size, attention to media, newspaper exposure, political website exposure, gender, education, employment, and household income.

Overall, for the main effects of agreement and expertise, the analyses reveal a statistically significant average treatment effect of disagreement on the frequency of discussion about the economy. Those who are exposed to more disagreement (agreement) are, as expected, slightly less (more) likely to discuss economic issues within their social network ($b = -.07$, 95% CI [$-.09$, $-.05$], as shown in Table 2). We find the opposite pattern, again as expected, for alter expertise levels influencing discussion frequency ($b = .24$, 95% CI [.23, .26]). An ego is more likely to discuss the economy with alters who are perceived to be more knowledgeable and informed about economic topics. These effects were similarly replicated for discussions about immigration, somewhat more strongly for political disagreement ($b = -.11$, 95% CI [$-.13$, $-.10$]) but to a similar degree for expertise ($b = .22$, 95% CI [.20, .24], as shown in Table 3). The findings clearly support H1 and H2 and are consistent with our speculation that, for political discussions involving conflict-laden topics (such as immigration issues), disagreement will register stronger effects, as evidenced in a stronger effect of disagreement in discussions about immigration than in discussions about the economy.

Next, we predict that the negative effects of (dis)agreement will be more pronounced for alters with more political expertise, or equally, the positive effect of expertise will be more pronounced for more agreement (H3). These expectations, again, receive strong support from the data for discussions about both the economy ($b = -.06$, 95% CI [$-.08$, $-.05$]) and immigration ($b = -.06$, 95% CI [$-.07$, $-.04$]). Figure 2 summarizes this interaction pattern in terms of predicted frequencies as a function of disagreement at sample $-1\ SD$ (red band), M (green band), and $+1\ SD$ (blue band) expertise levels, with 95% CIs based on 5,000 replications. The patterns reveal that, as alters' expertise increases, an ego is much less likely to discuss politics with alters who have different political views; therefore, the negative impact of political disagreement is much more pronounced with alters who have higher levels of expertise than with alters who have lower levels of expertise. The discussion frequency between a discussion partner who has a high level of expertise but with whom one disagrees is, at best, the same or lower than the discussion frequency between a discussion partner who has a low level of expertise but with whom one agrees (for discussions about the economy, difference = -0.008, 95% CI [$-.11$, .09]; for discussions about immigration, difference = -0.22, 95% CI [$-.32$, $-.12$]); at the same time, the preference toward "an ideal informant" (one with a high level of expertise and little disagreement) is higher than for any other types of discussion partners.[8]

---

[8] Here, a discussion partner with a high level of expertise but with whom one disagrees (A) is defined as an alter whose expertise is $+1SD$ but disagreement with an ego is at 5. A discussion partner with a low level of expertise but with whom one agrees (B) is defined as an alter whose expertise is $-1SD$ and their dyadic disagreement is at 1. We derive the predicted values of discussion frequencies and compute differences between the two cases (i.e., $d = A - B$).

Table 2. Multilevel Regressions Predicting the Frequency of Discussions About the Economy.

	Main effect	Two-way disagreement × expertise	Three-way agreeableness	Three-way neuroticism
Continuous treatment				
Disagreement	**−0.07** [−0.09, −0.05]*	**0.13** [0.07, 0.21]*	**−1.01** [−1.43, −0.63]*	−0.09 [−0.39, 0.21]
Expertise	**0.24** [0.23, 0.26]*	**0.38** [0.35, 0.44]*	−0.22 [−0.50, 0.03]	0.15 [−0.00, 0.36]
Alter (L1) covariate				
Gender	**0.05** [0.02, 0.08]*	**0.06** [0.03, 0.08]*	**0.05** [0.03, 0.08]*	**0.06** [0.04, 0.09]*
Interaction				
Disagreement × expertise		**−0.06** [−0.08, −0.05]*	**0.21** [0.10, 0.33]*	0.06 [−0.02, 0.15]
Disagreement × trait			**0.29** [0.20, 0.40]*	0.08 [−0.02, 0.19]
Expertise × trait			**0.15** [0.09, 0.23]*	**0.09** [0.02, 0.15]*
Disagreement × expertise × trait			**−0.07** [−0.10, −0.04]*	**−0.05** [−0.08, −0.02]*
Ego (L2) covariate				
Extroversion	**0.10** [0.08, 0.12]*	**0.10** [0.08, 0.12]*	**0.10** [0.07, 0.12]*	**0.11** [0.08, 0.12]*
Agreeableness	**−0.04** [−0.06, −0.01]*	**−0.04** [−0.06, −0.01]*	**−0.72** [−0.97, −0.48]*	**−0.04** [−0.06, −0.01]*
Conscientiousness	0.03 [−0.00, 0.05]	0.03 [−0.00, 0.04]	0.03 [−0.00, 0.04]	0.03 [−0.00, 0.04]
Neuroticism	0.01 [−0.02, 0.03]	0.01 [−0.02, 0.02]	−0.00 [−0.03, 0.02]	−0.14 [−0.37, 0.12]
Openness	0.00 [−0.03, 0.02]	0.01 [−0.02, 0.02]	0.01 [−0.02, 0.02]	0.00 [−0.03, 0.02]
Intercept	**1.40** [1.23, 1.72]*	**0.98** [0.73, 1.32]*	**3.60** [2.73, 4.69]*	**1.38** [0.66, 2.06]*
AIC	3,977.39	3,977.02	3,989.06	3,991.83
LL	−1,969.70	−1,968.51	−1,971.53	−1,972.91
N (L1/L2)	1,585 / 636	1,585 / 636	1,585 / 636	1,585 / 636

Note. Only significant three-way interaction models are presented.

* 95% bootstrapping confidence intervals outside of zero (based on 5,000 replications). Significant results are denoted as bold.

AIC = Akaike Information Criterion. LL = Log Likelihood.

Table 3. Multilevel Regressions Predicting the Frequency of Discussions About Immigration.

	Main effect	Two-way disagreement × expertise	Three-way extroversion	Three-way conscientiousness	Three-way neuroticism
Continuous treatment					
Disagreement	**−0.11** [−0.13, −0.10]*	**0.08** [0.02, 0.13]*	**0.40** [0.15, 0.63]*	**0.95** [0.69, 1.45]*	**0.43** [0.25, 0.67]*
Expertise	**0.22** [0.20, 0 .24]*	**0.35** [0.31, 0.38]*	**0.80** [0.63, 0.96]*	**0.98** [0.77, 1.37]*	**0.46** [0.32, 0.60]*
Alter (L1) covariate					
Alter gender	**0.11** [0.08, 0.13]*	**0.11** [0.08, 0.13]*	**0.11** [0.09, 0.13]*	**0.10** [0.08, 0.13]*	**0.11** [0.09, 0.13]*
Interaction					
Disagreement × expertise		**−0.06** [−0.07, −0.04]*	**−0.18** [−0.25, −0.11]*	**−0.34** [−0.48, −0.27]*	**−0.13** [−0.21, −0.08]*
Disagreement × trait			**−0.10** [−0.18, −0.02]*	**−0.22** [−0.34, −0.15]*	**−0.13** [−0.22, −0.07]*
Expertise × trait			**−0.14** [−0.19, −0.09]*	**−0.16** [−0.25, −0.11]*	−0.04 [−0.10, 0.01]
Disagreement × expertise × trait			**0.04** [0.01, 0.06]*	**0.07** [0.05, 0.10]*	**0.03** [0.01, 0.06]*
Ego (L2) covariate					
Extroversion	**0.06** [0.04, 0.09]*	**0.06** [0.03, 0.08]*	**0.51** [0.29, 0.70]*	**0.06** [0.03, 0.08]*	**0.06** [0.04, 0.09]*
Agreeableness	**0.03** [0.00, 0.05]*	**0.03** [0.01, 0.05]*	**0.03** [0.01, 0.06]*	**0.03** [0.01, 0.05]*	**0.03** [0.01, 0.06]*
Conscientiousness	**0.06** [0.03, 0.09]*	**0.05** [0.02, 0.08]*	**0.05** [0.03, 0.08]*	**0.58** [0.38, 0.97]*	**0.05** [0.03, 0.08]*
Neuroticism	0.02 [−0.01, 0.04]	0.02 [−0.01, 0.04]	0.02 [−0.01, 0.04]	0.02 [−0.01, 0.04]	**0.24** [0.05, 0.44]*
Openness	**0.12** [0.09, 0.14]*	**0.11** [0.08, 0.14]*	**0.12** [0.08, 0.14]*	**0.11** [0.08, 0.14]*	**0.11** [0.08, 0.13]*
Intercept	**1.78** [1.55, 2.03]*	**1.38** [1.13, 1.68]*	−0.03 [−0.69, 0.66]	−0.68 [−2.25, 0.14]	**0.77** [0.19, 1.33]*
AIC	4,076.07	4,076.56	4,088.90	4,092.38	4,092.79
LL	−2,019.04	−2,018.28	−2,021.45	−2,023.19	−2,023.40
N (L1/L2)	1,641/ 643	1,641 / 643	1,641 / 643	1,641 / 643	1,641 / 643

Note. Only significant three-way interaction models were presented.

* 95% bootstrapping confidence intervals outside of zero (based on 5,000 replications). Significant results are denoted as bold.
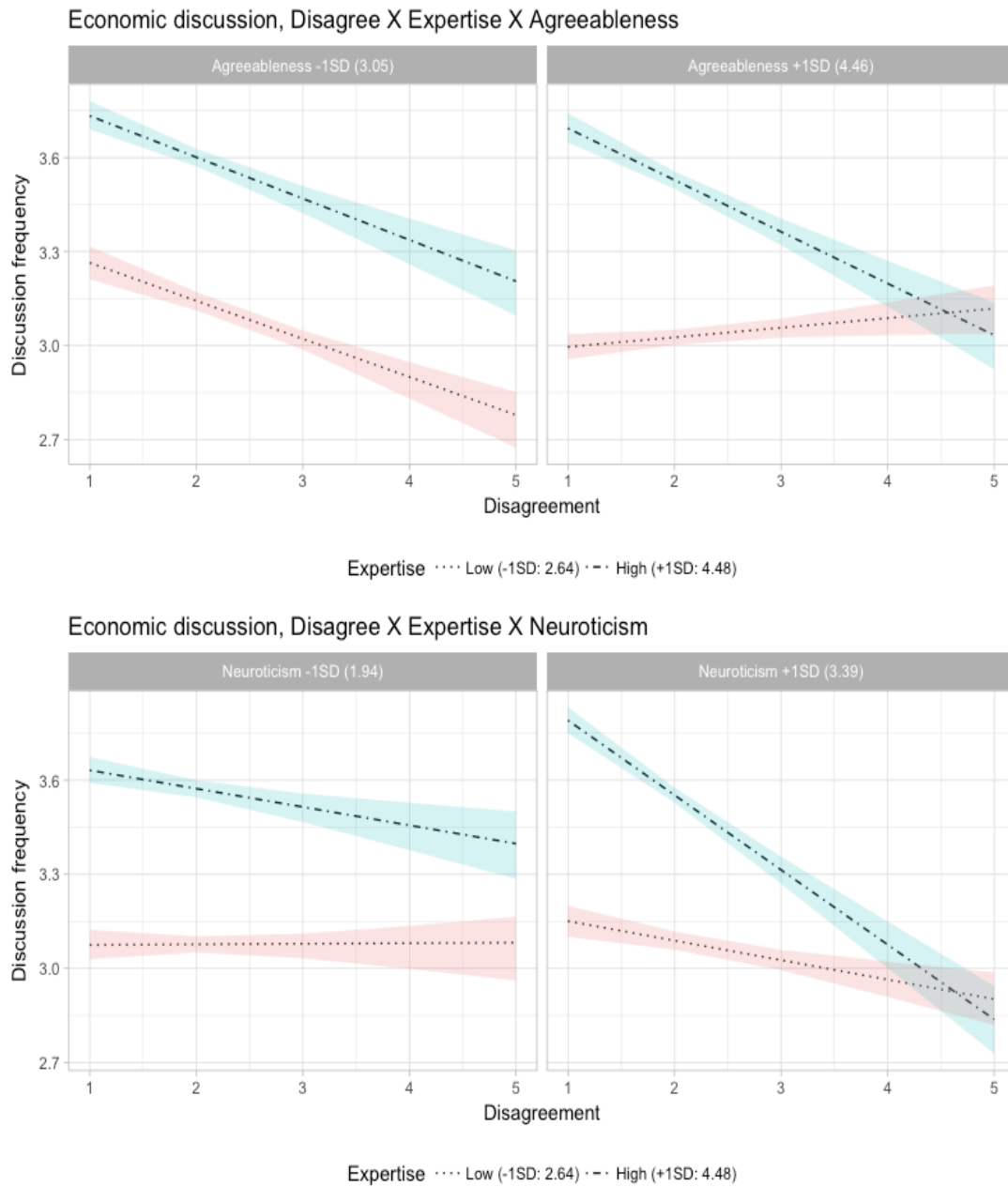
AIC = Akaike Information Criterion. LL = Log Likelihood.
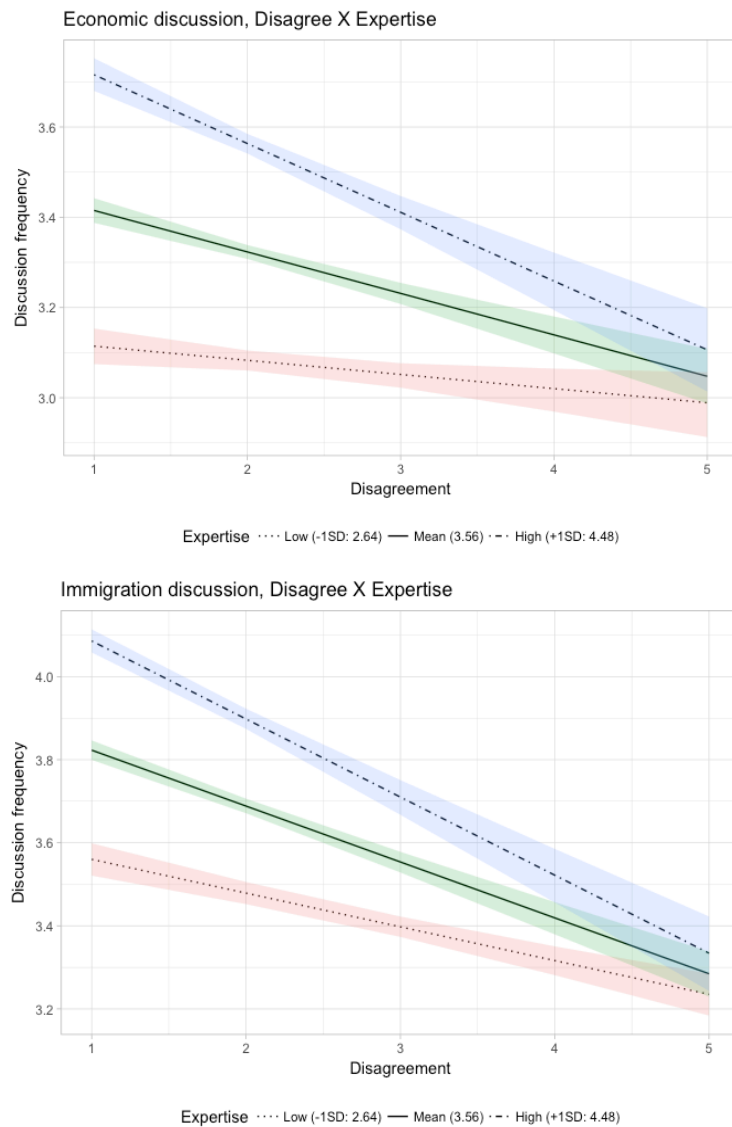
Figure 2. Two-way interactions between disagreement and expertise.

Before turning to the results of three-way interactions (answering RQ1), it is worth mentioning that we find mixed support for most of our initial expectations for patterns between disagreement and the Big-Five personality traits. For extroversion (H4a) and neuroticism (H4b), those who score high in extroversion or neuroticism were more likely to be adversely affected by disagreement, although not in all discussion topics (two-way interaction tables are available with the online supporting information). For agreeableness (H4c) and conscientiousness (H4d), findings do not support our expectations about discussions involving the economy or immigration. These mixed patterns of support for our expectations necessitate a consideration of the impact of alters' political expertise in assessing its relationship with the Big Five personality factors.
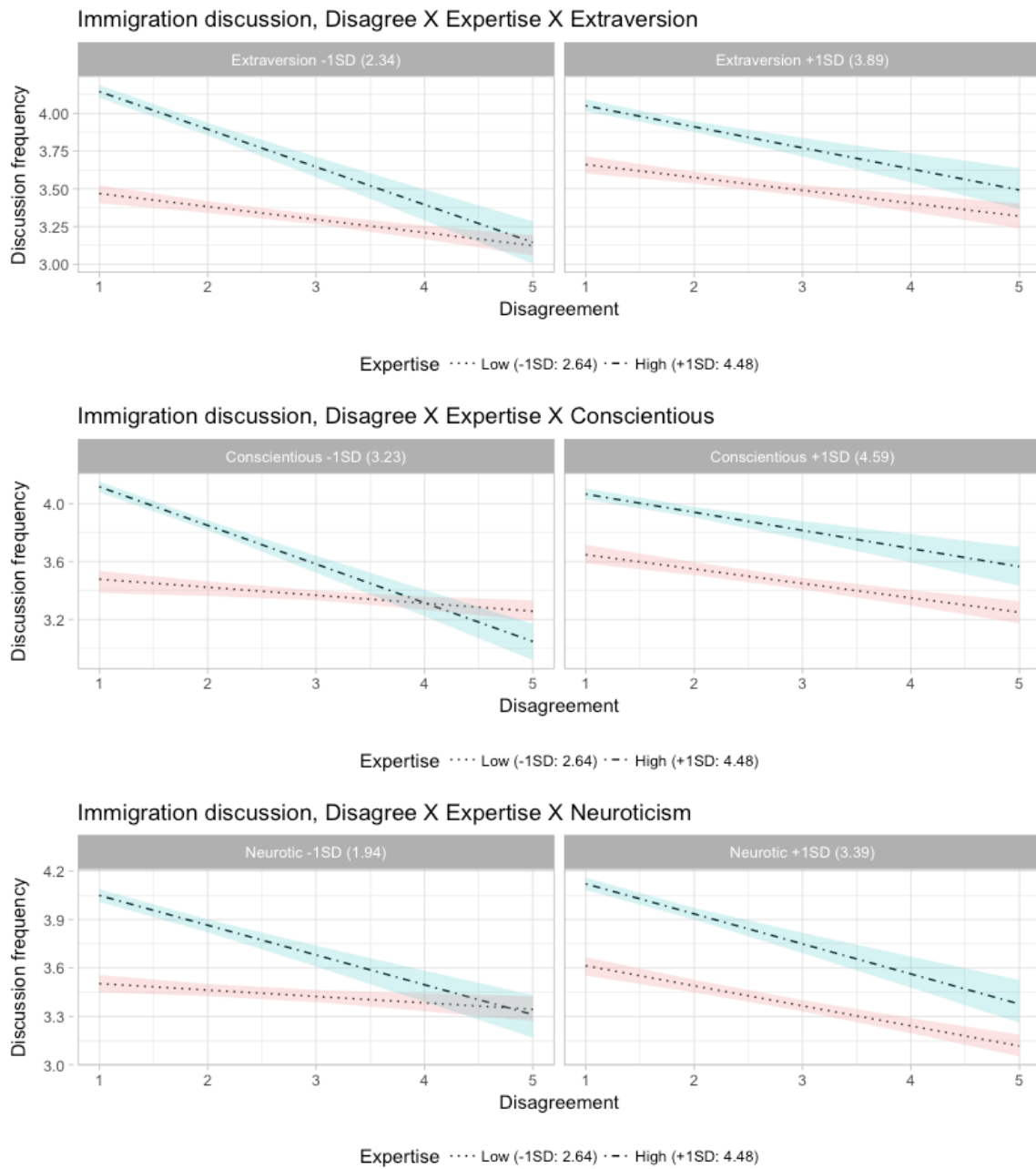
Turning to a series of three-way interactions, which is the focus of our analysis, agreeableness (Panel A in Figure 3: $b = -.07$, 95% CI [$-.10$, $-.04$]) and neuroticism (Panel B in Figure 3: $b = -.05$, 95% CI [$-.08$, $-.02$]) were found to be statistically significant for discussions about the economy. Significant three-way interactions were also found for extroversion (Panel A: $b = .04$, 95% CI [.01, .06]), conscientiousness (Panel B: $b = .07$, 95% CI [.05, .10]), and neuroticism (Panel C in Figure 4: $b = .03$, 95% CI [.01, .06]) for discussions about immigration. Figures 3 and 4 provide a visual interpretation of these findings in terms of the predicted marginal effects of disagreement at every combination of expertise (using sample minus and plus 1SD values) and the Big Five personality traits (using sample minus and plus 1SD values), again with 95% confidence intervals based on 5,000 replications.

For the frequency of discussions about the economy, the interaction between disagreement and expertise becomes more apparent (see Figure 3) as an ego's agreeableness (Panel A) or neuroticism (Panel B) increases. An increase in an ego's respective traits appears to mitigate the negative impact of disagreement for alters with lower levels of expertise, whereas the negative impact of disagreement is amplified for alters with higher levels of expertise. Yet in terms of relative preferences between alters with high expertise but with whom one disagrees versus alters with low expertise but with whom one shares similar views, the two cases did not differ when an ego's agreeableness is low (at $-1SD$: $d = -.056$, 95% CI [$-.21$, .08]) nor when agreeableness is high (at $+1SD$: $d = .037$, 95% CI [$-.10$, .17]). However, this difference is more pronounced and statistically significant as a function of the ego's neuroticism level. When neuroticism is low (at $-1SD$), there is a preference toward alters with expertise despite high levels of disagreement compared with alters with less expertise but who share similar political views ($d = .324$, 95% CI [.16, .45]). Yet when neuroticism is high (at $+1SD$), an ego is more likely to talk with alters with low expertise but similar views than with alters who have a high level of expertise but dissimilar views ($d = -.314$, 95% CI [$-.45$, $-.15$]), making them more responsive to disagreement.

Economic discussion, Disagree X Expertise X Agreeableness

Economic discussion, Disagree X Expertise X Neuroticism

Figure 3. Three-way interactions among disagreement, expertise, and traits, economic discussion.

Immigration discussion, Disagree X Expertise X Extraversion

Immigration discussion, Disagree X Expertise X Conscientious

Immigration discussion, Disagree X Expertise X Neuroticism

Figure 4. Three-way interactions among disagreement, expertise, and personality traits, immigration discussion.

Interestingly, the opposite pattern emerges for the frequency of discussions about immigration, especially for extroversion and conscientiousness, as shown in Figure 4. As one's extroversion or conscientiousness increases, the negative impact of disagreement in discussions about immigration gradually diminishes only for alters with high levels of expertise, whereas the same level of disagreement has slightly more negative consequences for alters with low levels of expertise. As a consequence, the preference toward alters with low expertise but with whom one shares similar political views becomes less apparent as one's extroversion increases from $-1SD$ ($d = -.322$, 95% CI [$-.48$, $-.16$]) to $+1SD$ ($d = -.171$, 95% CI [$-.30$, $-.01$]); in short, extroversion makes people a bit more responsive to an alter's level of expertise than to potential disagreement. Likewise, the relative preference toward alters with low expertise but with whom one shares similar political views becomes nonsignificant when an ego's conscientiousness level increases from $-1SD$ ($d = -.432$, 95% CI [$-.57$, $-.27$]) to $+1SD$ ($d = -.084$, 95% CI [$-.24$, $.07$]), indicating that conscientiousness makes individuals more responsive to expertise than to potential disagreement. Yet in terms of neuroticism, the preference toward alters with low expertise but with whom one shares similar political views increases slightly as an ego's score on neuroticism increases from $-1SD$ ($d = -.189$, 95% CI [$-.34$, $-.05$]) to $+1SD$ ($d = -.241$, 95% CI [$-.37$, $-.07$]), making an ego more responsive to potential disagreement than to an alter's level of expertise. This result is consistent with our speculation that certain traits mitigate the negative consequences of political disagreement depending on the discussion topic, albeit in conjunction with alters' expertise levels (per RQ2).

Discussion

For nearly half a century, scholars have examined antecedents that may shape citizens' exposure to information about politics, and understanding the nature and extent of political discussion in particular has contributed much to our knowledge of the complex interdependency patterns within which citizen's everyday exchange of political matters occurs. While this area of research highlights the political and attitudinal composition of people's networks (e.g., Mutz, 2002) as the core explanatory factor of network-based social influence, another line of thought emphasizes the importance of socially supplied political expertise (e.g., Huckfeldt, 2001; McClurg, 2006) in shaping citizen's involvement in the political process. Relevant to the earlier discussion of consistency versus accuracy motivations (Holbert et al., 2013; Kunda, 1990; Pavitt, 2010), our analysis suggests that both consistency (i.e., political disagreement) and accuracy needs (i.e., political expertise) are robust predictors of citizens' political interactions in their immediate social networks. Across our analyses, it is noteworthy that both the (dis)agreement-based and expertise-based perspectives are supported in a joint model controlling for each other's influence. Also, a consistent and strong preference is found for alters with higher political expertise in almost all situations, even when the discussants disagree in their political views.

A next step of our study seeks to determine whether independent effects of disagreement and expertise apply equally for all people or, as we expected, whether they are partly conditioned by individuals' personality characteristics—hence following up on earlier studies on this topic (Gerber et al., 2012; Hibbing et al., 2011; Mondak, 2010). We explore whether people's stable personality characteristics condition the way they respond to their immediate social surroundings when two primary antecedents of political discussion—disagreement and expertise—are intertwined and whether that differs in discussions of different political topics. Our exploratory analyses provide preliminary evidence that the effect of consistency needs

is indeed subject to the quite complex moderating influence of political expertise and personality traits. Given our modeling strategy, which speaks for reasonably robust findings in support of the expertise perspectives, we should be more cautious in interpreting the effect of political agreement when such effect is probed without additionally considering the impact of expertise or personality traits.

Specifically, for political disagreement predicting discussion of the less conflict-laden economic topic, agreeableness and neuroticism interact with disagreement and expertise. This pattern is more pronounced among those who score high in agreeableness and among those who score high in neuroticism. While observed amplification patterns in a series of three-way interactions makes intuitive sense (i.e., those who are emotionally less stable and more conflict-avoidant are likely to be more averse to alters with whom they disagree, and especially so if these alters have a high level of expertise about politics), we also find the moderating influence of extroversion on disagreement, independent of alters' expertise level. Traditionally, extroversion is considered to be a diminishing factor of disagreement, based on the expectation that those who score high on extroversion maintain a more energetic and assertive approach to the outside world, therefore making them less responsive to social influence (e.g., Hibbing et al., 2011). Yet contrary to previous findings, our results reveal that people who score high on extroversion are less likely to discuss politics when they experience disagreement, at least in discussions about the economy.

For more socially sensitive and conflict-laden topics, such as immigration, openness, extroversion, and agreeableness decrease the impact of disagreement. Further, extroversion, conscientiousness, and neuroticism interact with disagreement and expertise. This pattern is more pronounced among those who score low in each trait dimension, in that disagreement with alters who have high levels of expertise have more negative consequences than alters with low levels of expertise, but such differences only appear when one's extroversion, conscientiousness, and neuroticism are low. Conversely, as one's extroversion, conscientiousness, and neuroticism increase, the negative impact of disagreement on the frequency of discussions about immigration gradually diminishes for alters with high expertise, whereas the same level of disagreement has slightly more negative consequences for alters with low expertise. It appears that such traits make the influence of alters' expertise level less consequential as they become (relatively) more uniformly responsive to disagreement than they are differentially responsive to expertise and disagreement levels. These results are consistent with our expectation that, for more socially controversial topics, the effect of political disagreement will be more pronounced than it is for less controversial topics, although the specific patterns also depend on one's personality as well as the expertise level of the person with whom they experience such disagreement.

Overall, the empirical pattern depicts a much more nuanced picture: not all citizens are equally affected by the social supply of political disagreement, and we should be cautious in interpreting the effect of disagreement identified in previous research. While there is a general preference for alters who share similar political views and who have a high level of expertise independently, when such factors are interacted, expertise and agreement have multiplicative effects in predicting discussion frequency. Further, neuroticism appears to make people more responsive to disagreement than an alter's expertise in discussions about the economy, while extroversion and conscientiousness make people a bit more responsive to an alter's expertise than to potential disagreement in discussions about immigration. Based on a consistency versus accuracy (or understanding) motivation framework (Holbert et al., 2013; Kunda,

1990; Pavitt, 2010), we therefore probe whether and how those two motivations are complexly intertwined in a more realistic political discussion setting. Though having others in their network whom they tend to agree with may motivate people to discuss politics to some degree, it seems that having people in one's network who are knowledgeable about political issues strongly propels people to discuss such issues more frequently, albeit conditionally based on one's personality traits. Our results demonstrate that exposure to diverse political perspectives may have heterogeneous effects, especially depending on the relative expertise levels of people's discussion partners and their own personality traits. We also find suggestive evidence that such influence is not likely to be identical across different discussion topics. Overall, our results bolster the claim that one needs to simultaneously consider individuals' traits, their surrounding environment, and the interactions between those two (Mondak, 2010) to form a more nuanced explanatory model for political discussion. The present study is a first step toward better understanding these nuances.

A few limitations need to be acknowledged. First and foremost, we rely on data from a single country (Austria), which may be considered an appropriate example for a developed, Western democracy. Yet it remains to be seen whether the issue-specific discussion measurements yield different results in the context of different material or sociocultural cleavages. Also, the cross-sectional nature of the data prevents us from robustly testing our predictions. Although experimentally inducing the level of political (dis)agreement and supply of expertise is a viable option, it might introduce additional concern over the external validity of such an approach. Instead, we have relied on a propensity score weighting technique for addressing possible selection bias of the nonexperimental nature of the data while addressing more realistic patterns of social influence among the general public. Nevertheless, future studies would benefit from the use of more robust, yet externally more realistic experimental designs or by triangulation of different analytic methods (e.g., computer simulation with real world–based inputs) to address such concerns.

We did not find expected interaction effects with some of the Big Five personality characteristics. While we cannot rule out the possibility that such null findings are due to the lower-than-ideal number of observations and measurement quality of the personality factors in our data, such concerns are unwarranted when compared to the vast majority of studies that use nonspecific, general political discussion frequency, ignoring the inherent interdependencies in personal networks.

Finally, it should be acknowledged that our findings are qualified by the name-generator nature of our data. It is now well understood that name-generator techniques with a fixed number of alters (like the one employed here) are more likely to elicit "strong tie" networks and are, therefore, likely to capture a small, biased subset of alters (Marin, 2004). It is conceivable that the documented patterns would be different if we had been able to solicit weak ties as well.

Despite such concerns, overall our findings contribute important nuances to the rapidly evolving literature on interpersonal discussion. By considering different types of political discussions that span the economic and sociocultural dimension of topics that are more or less conflict-laden) and by integrating (dis)agreement and expertise factors with their interactive relationships to personality traits, we advance the conditional view of social influence and social interactions among citizens. It needs to be acknowledged that these influences do not apply uniformly to all citizens; rather, they depend on stable characteristics of the individual and the nature of political interactions that a person has with his or her social contacts. While

socially supplied expertise and social support (agreement) may have powerful consequences, for some individuals, neither expertise nor agreement cause more discussion, and it is vital to understand which factors cause these people to further discuss politics, if at all. Future studies would thus be well advised to consider such heterogeneity and its boundary conditions.

References

Ahn, T. K., Huckfeldt, R., Mayer, A. K., & Ryan, J. B. (2013). Expertise and bias in political communication networks. *American Journal of Political Science*, *57*(2), 357–373.

Arpino, B., & Mealli, F. (2011). The specification of the propensity score in multilevel observational studies. *Computational Statistics and Data Analysis*, *55*(4), 1770–1780.

Baldasaro, R. E., Shanahan, M. J., & Bauer, D. J. (2013). Psychometric properties of the Mini-IPIP in a large, nationally representative sample of young adults. *Journal of Personality Assessment*, *95*(1), 74–84.

Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, *38*(4), 668–678.

Costa, P. T., Jr., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO personality inventory. *Psychological Assessment*, *4*(1), 5–13.

Djupe, P. A., & Sokhey, A. E. (2014). The distribution and determinants of socially supplied political expertise. *American Politics Research*, *42*(2), 199–225.

Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The Mini-IPIP scales: Tiny-yet-effective measure of the Big Five factors of personality. *Psychological Assessment*, *18*(2), 192–203.

Downs, A. (1957). *An economic theory of democracy*. New York, NY: Harper and Row.

Eveland, W. P., Jr., & Hively, M. H. (2009). Political discussion frequency, network size, and "heterogeneity" of discussion as predictors of political knowledge and participation. *Journal of Communication*, *59*(2), 205–224.

Eveland, W. P., Jr., Song, H., & Beck, P. A. (2015). Cultural variations in the relationships among network political agreement, political discussion frequency, and voting turnout. *International Journal of Public Opinion Research*, *27*(4), 461–480.

Fitzgerald, J. (2013). What does "political" mean to you? *Political Behavior*, *35*(3), 453–479.

Fong, C., Hazlett, C., & Imai, K. (2018). Covariate balancing propensity score for a continuous treatment: Application to the efficacy of political advertisements. *Annals of Applied Statistics*, *12*(1), 156–177.

Frimer, J. A., Skitka, L. J., & Motyl, M. (2017). Liberals and conservatives are similarly motivated to avoid exposure to one another's opinions. *Journal of Experimental Social Psychology*, *72*, 1–12.

Gerber, A. S., Huber, G. A., Doherty, D., & Dowling, C. M. (2011). The Big Five personality traits in the political arena. *Annual Review of Political Science*, *14*(1), 265–287.

Gerber, A. S., Huber, G. A., Doherty, D., & Dowling, C. M. (2012). Disagreement and the avoidance of political discussion: Aggregate relationships and differences across personality traits. *American Journal of Political Science*, *56*(4), 849–874.

Goel, S., Mason, W., & Watts, D. J. (2010). Real and perceived attitude agreement in social networks. *Journal of Personality and Social Psychology*, *99*(4), 611–621.

Hibbing, M. V., Ritchie, M., & Anderson, M. R. (2011). Personality and political discussion. *Political Behavior*, *33*(4), 601–624.

Holbert, R. L., Weeks, B. E., & Esralew, S. (2013). Approaching the 2012 US presidential election from a diversity of explanatory principles: Understanding, consistency, and hedonism. *American Behavioral Scientist*, *57*(12), 1663–1687.

Huckfeldt, R. (2001). The social communication of political expertise. *American Journal of Political Science*, *45*(2), 425–438.

Huckfeldt, R., Pietryka, M. T., & Reilly, J. (2014). Noise, bias, and expertise in political communication networks. *Social Networks*, *36*, 110–121.

Imai, K., & Ratkovic, M. (2014). Covariate balancing propensity score. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, *76*(1), 243–263.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big-five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114–158). New York, NY: Guilford Press.

Jost, J. T., & Krochik, M. (2014). Ideological differences in epistemic motivation: Implications for attitude structure, depth of information processing, susceptibility to persuasion, and stereotyping. In A. J. Elliot (Eds.), *Advances in motivation science* (Vol. 1, pp. 181–231). San Diego, CA: Elsevier.

Kriesi, H., Grande, E., Dolezal, M., Helbling, M., Höglinger, D., Hutter, S., & Wüest, B. (2012). *Political conflict in Western Europe*. New York, NY: Cambridge University Press.

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, *108*(3), 480–498.

Lyons, J., Sokhey, A. E., McClurg, S. D., & Seib, D. (2016). Personality, interpersonal disagreement, and electoral information. *Journal of Politics*, *78*(3), 806–821.

Marin, A. (2004). Are respondents more likely to list alters with certain characteristics? Implications for name generator data. *Social Networks*, *26*(4), 289–307.

McClurg, S. D. (2006). The electoral relevance of political talk: Examining disagreement and expertise effects in social networks on political participation. *American Journal of Political Science*, *50*(3), 737–754.

McCrae, R. R., & Costa, P. T., Jr. (1997). Personality trait structure as a human universal. *American Psychologist*, *52*(5), 509–516.

Mondak, J. J. (2010). *Personality and the foundations of political behavior*. New York, NY: Cambridge University Press.

Mondak, J. J., & Halperin, K. D. (2008). A framework for the study of personality and political behaviour. *British Journal of Political Science*, *38*(2), 335–362.

Morey, A. C., & Eveland, W. P., Jr. (2016). Measures of political talk frequency: Assessing reliability and meaning. *Communication Methods and Measures*, *10*(1), 51–68.

Mutz, D. C. (2002). The consequences of cross-cutting networks for political participation. *American Journal of Political Science*, *46*(4), 838–855.

Nir, L. (2011). Motivated reasoning and public opinion perception. *Public Opinion Quarterly, 75*(3), 504–532.

Pavitt, C. (2010). Alternative approaches to theorizing in communication science. In C. R. Berger, M. E. Roloff, & D. R. Ewoldsen (Eds.), *The handbook of communication science* (2nd ed., pp. 37–54). Thousand Oaks, CA: SAGE Publications.

Pietryka, M. T. (2016). Accuracy motivations, predispositions, and social information in political discussion networks. *Political Psychology*, *37*(3), 367–386.

Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika*, *70*(1), 41–55.

Schmitt-Beck, R., & Lup, O. (2013). Seeking the soul of democracy: A review of recent research into citizens' political talk culture. *Swiss Political Science Review*, *19*(4), 513–538.

Sokhey, A. E., & McClurg, S. D. (2012). Social networks and correct voting. *Journal of Politics*, *74*(3), 751–764.

Taber, C. S., & Lodge, M. (2006). Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science*, *50*(3), 755–769.

Wyss, R., Ellis, A. R., Brookhart, M. A., Girman, C. J., Jonsson Funk, M., LoCasale, R., & Stürmer, T. (2014). The role of prediction modeling in propensity score estimation: An evaluation of logistic regression, bCART, and the covariate-balancing propensity score. *American Journal of Epidemiology*, *180*(6), 645–655.

Zhu, Y., Coffman, D. L., & Ghosh, D. (2015). A boosting algorithm for estimating generalized propensity scores with continuous treatments. *Journal of Causal Inference*, *3*(1), 25–40.