

## **Online Appendix:**

# **‘Personality and EU Attitudes: Relationships across EU Attitude Dimensions’**

June 2015

## Table of Contents

Online Appendix A: Item Wording Mini-IPIP .....	3
Online Appendix B: Factor Structure Mini-IPIP .....	4
Online Appendix C: Descriptive statistics .....	5
Online Appendix D: Split Widening to the EU dimension .....	8
Online Appendix E: Predicted means of the covariates .....	10
Online Appendix F: Indirect Associations .....	12
Online Appendix G: Personality X Political Knowledge .....	16

## Online Appendix A: Item Wording Mini-IPIP

### Introduction to participants

Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Indicate for each statement whether it is:

1. Very inaccurate
2. Moderately inaccurate
3. Neither accurate nor inaccurate
4. Moderately accurate
5. Very accurate

**Table A.1.** Item Wording of the 20-item IPIP Battery.

Wording	
<i>Openness</i>	
1	Have a vivid imagination
2	Am not interested in abstract ideas (R)
3	Have difficulty understanding abstract ideas (R)
4	Do not have a good imagination (R)
<i>Conscientiousness</i>	
5	Get chores done right away
6	Like order
7	Make a mess of things (R)
8	Often forget to put things back in their proper place (R)
<i>Extraversion</i>	
9	Am the life of the party
10	Talk to a lot of different people at parties
11	Don't talk a lot (R)
12	Keep in the background (R)
<i>Agreeableness</i>	
13	Sympathize with others' feelings
14	Feel others' emotions
15	Am not interested in other people's problems (R)
16	Am not really interested in others (R)
<i>Neuroticism</i>	
17	Get upset easily
18	Have frequent mood swings
19	Am relaxed most of the time (R)
20	Seldom feel blue (R)

## Online Appendix B: Factor Structure Mini-IPIP

We ran a Confirmatory Factor Analysis to assess factor structure of the Mini IPIP. The factor structure is acceptable (see Table B.1). The indices of the model fit are not perfect but they are in line with existing research (Baldasaro et al., 2013; Cooper et al., 2010; Donnellan et al., 2006).

**Table B.1.** Factor Loadings and Model Fit Mini-IPIP.

	Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
1	0.24				
2	0.66				
3	0.82				
4	0.34				
5		0.57			
6		0.62			
7		0.65			
8		0.63			
9			0.62		
10			0.65		
11			0.73		
12			0.70		
13				0.61	
14				0.56	
15				0.72	
16				0.80	
17					0.64
18					0.72
19					0.66
20					0.64

*Note:* Model fit indices:  $\chi^2 = 980.23$ ; RMSEA = 0.066 [0.062, 0.070]; CFI = 0.861; TLI = 0.835; SRMR = 0.057).

## Online Appendix C: Descriptive statistics

Here we describe the item wording of the covariates and the descriptive statistics of these covariates (see Table C.1) and the correlations between all the dependent variables and the independent variables (Table C.2).

First, government approval was measured using one item asking 'The current national government is doing a good job'. This item was scored on a seven-point Likert-scale ranging from 'strongly disagree' (1) through 'strongly agree' (7). Economic outlook was measured using one item. Specifically, participants were asked: 'Looking at the economic situation in the Netherlands, do you think the situation will be better or worse twelve months from now?' This item was scored on a seven-point Likert scale ranging from 'much worse' (1) through 'much better' (7).

Attitudes towards immigrants were scored using five items, such as 'Immigrants are a threat to the security of Dutch people'. Again, the items were scored on a seven-point Likert-scale ranging from 'strongly disagree' (1) through 'strongly agree' (7). The items were internally consistent (Cronbach  $\alpha = 0.80$ ). The items were scored to range on a scale from positive attitudes towards immigrants (0) through ant-immigrants attitudes (1). National identity was measured using four items, such as 'I am proud to be a Dutch citizen'. The four items were internally consistent (Cronbach  $\alpha = 0.87$ ) and we created a scale ranging from no national identity (0) through a high national identity (1).

Political knowledge was measured using five items tapping into knowledge about politics. For instance, participants were asked to indicate 'what is the name of the current minister of foreign affairs'. Note that they could choose from five different options or signal 'don't know'. We created an additive scale ranging from no questions correct through all questions correct (5). Lastly, political interest was measured using one item, namely 'How

interested are you in politics'. Respondents answered on a seven-point Likert-scale ranging from 'not at all interested' (1) through 'very much interested' (7).

**Table C.1.** Descriptive Statistics Control Variables.

	M	SD	%	$\alpha$	Min	Max	# items
Gender							1
Men			49.15				
Woman			50.85				
Age	4.21	1.42			1	6	1
Income	5.61	2.97			1	11	1
Education							1
No education			5.11				
Preparatory secondary education			14.91				
High school (first 3 years)			4.86				
Secondary vocational education			34.58				
Pre-university education			4.86				
Some college			24.62				
College			11.07				
Government Approval	0.33	0.24			0	1	1
Economic Outlook	0.49	0.20			0	1	1
Political Interest	0.49	0.28			0	1	1
Political Knowledge	0.37	0.22		0.55	0	1	5
Anti-immigrant Attitudes	0.57	0.23		0.82	0	1	5
National Identity	0.69	0.22		0.87	0	1	4

*Note:* N = 1174. Income is scored in 11 categories. Age is scored in six age categories.

**Table C.2.** Correlations between the Dependent Variables and Key Independent Variables.

	1	2	3	4	5	6	7	8	9	10
1. Widening	-									
2. Deepening	0.33*	-								
3. Trust	0.44*	0.51*	-							
4. Identity	0.34*	0.63*	0.63*	-						
5. Negative Affect towards the EU	-0.36*	-0.32*	-0.57*	-0.35*	-					
6. Openness	0.18*	0.07*	0.12*	0.05	-0.16*	-				
7. Conscientiousness	0.00	0.04	0.04	-0.01	-0.08*	0.07*	-			
8. Extraversion	-0.07*	0.01	0.01	0.05	-0.01	0.21*	0.07*	-		
9. Agreeableness	0.07*	-0.06*	0.05	-0.01	-0.07*	0.16*	0.27*	0.22*	-	
10. Neuroticism	0.02	0.01	-0.04	0.01	0.10*	-0.16*	-0.16*	-0.20*	-0.07*	-

\*p&lt;0.05

## Online Appendix D: Split Widening to the EU dimension

The item tapping into the attitude towards admission of Iceland to the EU loaded somewhat lower on the widening dimension (Table 2 in the paper) compared to the attitude towards admission of Turkey and/or Montenegro. Accordingly, one might wonder to what extent the correlates of including Iceland in the EU are different compared to Turkey and Montenegro. We created two new independent variables. The first dimension taps into the admission of Turkey and Montenegro ( $\alpha = 0.77$ ). The second dimension taps into the admission of Iceland. The two dimensions are modestly correlated ( $r = 0.48$ ).

Table D1 presents the results for two OLS regression models where we estimate the same model as presented in Table 2 of the paper but instead we focus upon attitudes towards admission of Turkey and Montenegro (Table D.1, column 1) and attitudes towards the admission of Iceland (Table D.2, column 2). The only difference is reported with regard the trait Extraversion. This means that the highly extraverted are only more opposed to the introduction of Iceland but not the introduction of Turkey and Montenegro. When it comes to the control variables, the anti-immigrant attitudes and national identity are strong correlates of attitudes towards Turkey and Montenegro but not towards Iceland.



**Table D.1.** Attitudes towards widening the EU: Turkey and Montenegro as well as Iceland.

	<b>Turkey and Montenegro</b>	<b>Iceland</b>
	<i>(1)</i>	<i>(2)</i>
Openness	0.15* (0.04)	0.14* (0.06)
Conscientiousness	-0.03 (0.04)	0.03 (0.05)
Extraversion	-0.05 (0.04)	-0.15* (0.05)
Agreeableness	0.11* (0.04)	0.11* (0.05)
Neuroticism	0.12* (0.04)	0.14* (0.05)
Sex	0.00 (0.01)	-0.04* (0.02)
Age	0.00 (0.01)	0.01 (0.01)
Education	0.01* (0.00)	0.03* (0.01)
Income	0.00 (0.00)	0.00 (0.00)
Government Approval	0.21* (0.03)	0.13* (0.04)
Economic Outlook	0.14* (0.04)	0.23* (0.05)
Political Interest	0.03 (0.03)	0.01 (0.04)
Political Knowledge	-0.04 (0.03)	0.14* (0.04)
Anti-immigrant attitudes	-0.14* (0.03)	-0.05 (0.04)
National identity	-0.12* (0.03)	-0.01 (0.04)
Constant	0.12 (0.06)	0.02 (0.08)
N	1174	1174
R <sup>2</sup>	0.17	0.17

Note: OLS regression models with standard errors are reported in parentheses. \*p<0.05

## **Online Appendix E: Predicted means of the covariates**

Table E.1 provides the predicted mean EU attitudes of the covariates at 2 standard deviations above and below the mean.

**Table E.1.** Predicted EU attitudes at *Two Standard Deviations Below the Mean* and *Two Standard Deviations Above the Mean*.

		<b>Widening</b>	<b>Deepening</b>	<b>Trust</b>	<b>Identity</b>	<b>Negative Affect towards the EU</b>
		(1)	(2)	(3)	(4)	(5)
Sex	Male	Ns	Ns	Ns	0.25 (0.24, 0.27)	Ns
	Female				0.28 (0.26, 0.30)	
Age	- 2SD	Ns	0.23 (0.21, 0.26)	Ns	Ns	Ns
	+2 SD		0.28 (0.26, 0.30)			
Education	- 2SD	0.33 (0.31, 0.35)	ns	Ns	Ns	0.43 (0.41, 0.46)
	+2 SD	0.42 (0.40, 0.45)				0.33 (0.30, 0.35)
Economic Outlook	- 2SD	0.31 (0.28, 0.34)	0.20 (0.17, 0.23)	0.21 (0.19, 0.24)	0.18 (0.15, 0.21)	0.52 (0.49, 0.55)
	+2 SD	0.44 (0.41, 0.46)	0.30 (0.27, 0.33)	0.44 (0.41, 0.46)	0.35 (0.32, 0.38)	0.26 (0.23, 0.29)
Political Interest	- 2SD	Ns	0.20 (0.17, 0.23)	0.28 (0.26, 0.31)	0.21 (0.19, 0.24)	Ns
	+2 SD		0.29 (0.27, 0.31)	0.36 (0.34, 0.38)	0.31 (0.29, 0.33)	
Political Knowledge	- 2SD	Ns	0.28 (0.25, 0.31)	0.35 (0.33, 0.37)	0.30 (0.29, 0.33)	Ns
	+2 SD		0.22 (0.19, 0.25)	0.30 (0.28, 0.33)	0.23 (0.20, 0.25)	
Anti-immigrant	- 2SD	0.43 (0.40, 0.46)	0.30 (0.27, 0.34)	0.39 (0.37, 0.42)	0.32 (0.29, 0.35)	0.32 (0.29, 0.35)
	+2 SD	0.33 (0.30, 0.36)	0.21 (0.18, 0.24)	0.27 (0.25, 0.29)	0.22 (0.20, 0.25)	0.44 (0.41, 0.47)
National identity	- 2SD	0.41 (0.38, 0.44)	0.33 (0.30, 0.36)	0.38 (0.35, 0.40)	0.29 (0.27, 0.32)	0.31 (0.28, 0.34)
	+2 SD	0.35 (0.33, 0.37)	0.20 (0.18, 0.23)	0.29 (0.27, 0.31)	0.25 (0.23, 0.27)	0.44 (0.42, 0.46)

*Note:* Predicted means at two standard deviations above and below the mean with 95% confidence intervals are reported between parentheses.

## Online Appendix F: Indirect Associations

Here we assess the indirect effects of personality traits on EU attitudes. We start with the discussion of indirect associations by examining the associations between the four political motivational control variables and the personality traits. In Table F.1, we present the results of six OLS regression analyses where we regressed the political motivational control variables on the personality traits.

Generally, our findings confirm that the personality traits, especially Openness, are correlated with political interest and political knowledge (Gerber et al., 2011; Mondak and Halperin, 2008). We also observe associations between attitudes towards immigrants and the traits Conscientiousness and Neuroticism (Gallego and Pardos-Prado, 2014) but not Openness and Agreeableness. We also observe associations with national identification. Indeed, Agreeableness is positively associated with national identification (Duckitt and Sibley, 2014). But we also find a positive association between Extraversion and national identity and a negative association between Neuroticism and national identity. The associations between the personality traits and the governmental approval and economic evaluations have not received much attention in the literature and the personality traits seem generally unrelated to these covariates.

Importantly, one could argue that the effects of personality traits are mediated by the political motivational covariates. Mediation analyses has received considerable criticism (Bullock et al., 2010; Imai et al., 2011). However, we estimated the direct, indirect and total effects for each of the personality traits on the different EU attitudes in a series of structural equation models. We expected the effects of the personality traits to be direct and not mediated via the political motivational control variables. As can be seen in Table F.2 we find

indeed only direct associations between the personality traits and the EU attitudes. There are no substantive indirect effects of the personality traits via the political motivational variables. In sum, we have observed that personality traits are predictors of the political motivational variables. Yet, the effect of personality traits on the EU attitudes does not travel via these political motivational variables.

**Table F.1.** Personality traits and political motivational covariates.

	Government Approval	Economic Outlook	Political Interest	Political Knowledge	Anti-immigrant Attitudes	National Identity
Openness	-0.02 (0.05)	-0.00 (0.04)	0.18* (0.05)	0.11* (0.04)	-0.07 (0.04)	-0.08 (0.04)
Conscientiousness	0.08 (0.04)	0.04 (0.04)	-0.02 (0.04)	0.02 (0.04)	0.08* (0.04)	0.12* (0.04)
Extraversion	-0.02 (0.04)	-0.07 (0.03)	0.10* (0.04)	0.02 (0.03)	0.05 (0.04)	0.10* (0.03)
Agreeableness	-0.10* (0.04)	-0.06 (0.04)	0.15* (0.05)	0.02 (0.04)	0.02 (0.04)	0.18* (0.04)
Neuroticism	-0.08* (0.04)	-0.07* (0.03)	-0.09* (0.04)	-0.08* (0.03)	0.08* (0.04)	-0.07* (0.03)
Sex	0.02 (0.01)	-0.00 (0.01)	-0.09* (0.02)	-0.05* (0.01)	-0.04* (0.01)	-0.04* (0.01)
Age	-0.01 (0.01)	0.00 (0.00)	0.03* (0.01)	0.02* (0.00)	-0.02* (0.00)	0.00 (0.00)
Education	0.02* (0.00)	0.02* (0.00)	0.02* (0.00)	0.02* (0.00)	-0.03* (0.00)	-0.03* (0.00)
Income	0.00 (0.00)	0.01* (0.00)	-0.01* (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Constant	0.29* (0.05)	0.41* (0.05)	0.15* (0.06)	0.13* (0.05)	0.71* (0.05)	0.64* (0.05)
N	1174	1174	1174	1174	1174	1174
R <sup>2</sup>	0.05	0.05	0.12	0.09	0.06	0.11

*Note:* Standard errors are reported in parentheses. Weights are applied. \*p<0.05

**Table F.2.** Total, Direct and Indirect Effects of Personality Traits on the EU attitude dimensions.

	<i>Total Effect</i>	<i>Direct effect</i>	<i>Indirect effect</i>
<b>Widening</b>			
Openness	0.16* (0.06)	0.15* (0.05)	0.02 (0.03)
Conscientiousness	-0.01 (0.07)	-0.01 (0.05)	0.00* (0.03)
Extraversion	-0.11* (0.04)	-0.09* (0.04)	-0.03 (0.02)
Agreeableness	0.07 (0.06)	0.11* (0.06)	-0.04 (0.03)
Neuroticism	0.09 (0.06)	0.12 (0.05)	-0.03 (0.02)
<b>Deepening</b>			
Openness	0.04 (0.04)	0.07 (0.05)	0.03 (0.02)
Conscientiousness	-0.01 (0.03)	0.11 (0.04)	-0.01 (0.02)
Extraversion	0.06 (0.03)	0.06* (0.04)	-0.03 (0.02)
Agreeableness	-0.10* (0.04)	-0.14* (0.04)	-0.04 (0.03)
Neuroticism	0.04 (0.03)	0.08 (0.04)	-0.02 (0.02)
<b>Trust</b>			
Openness	0.04 (0.06)	0.02 (0.04)	0.02 (0.04)
Conscientiousness	0.07 (0.06)	0.06 (0.03)	0.01 (0.04)
Extraversion	-0.02 (0.04)	0.02 (0.03)	-0.04 (0.03)
Agreeableness	-0.06 (0.07)	0.00 (0.04)	-0.06 (0.05)
Neuroticism	-0.02 (0.06)	0.03 (0.03)	-0.05 (0.04)
<b>Identity</b>			
Openness	0.00 (0.05)	-0.02 (0.04)	0.02 (0.03)
Conscientiousness	-0.02 (0.06)	0.02 (0.05)	0.00 (0.03)
Extraversion	0.04 (0.04)	0.06# (0.03)	-0.02 (0.02)
Agreeableness	-0.06 (0.06)	-0.03 (0.04)	-0.03 (0.03)
Neuroticism	0.01 (0.05)	0.04 (0.04)	-0.04 (0.02)
<b>Negative Affect</b>			
Openness	-0.06 (0.09)	-0.05 (0.06)	-0.01 (0.05)
Conscientiousness	-0.07 (0.09)	-0.07 (0.05)	-0.00 (0.04)
Extraversion	0.06 (0.05)	0.00 (0.04)	0.05 (0.03)
Agreeableness	0.07 (0.09)	0.01 (0.06)	0.08 (0.05)
Neuroticism	0.11 (0.06)	0.07 (0.04)	0.04 (0.04)

Note: OLS regression models with standard errors are reported in parentheses. \*p<0.05

## **Online Appendix G: Personality X Political Knowledge**

We have considered the thoughtful observation that there could be interactions between Big Five traits and education as well as other theoretically relevant predictors of EU attitudes. The most likely interaction would be between personality traits and political knowledge (Jost et al., 2009), education (Osborne and Sibley, 2012, 2015), and political interest (Leone et al., 2012). For all three variables the argument would be that the more knowledgeable, educated, and interested voters would be better equipped to align their Big Five traits with their EU attitudes.

In this supplementary material, we have explored this opportunity in a series of subsequent models. We find, in line with the suggestion by Jost and colleagues (2009) there are significant interactions between Openness and political knowledge across EU attitude dimensions. There is a statistically significant marginal effect of Openness on the different EU attitudes among the political knowledgeable compared to voters with lower levels of political knowledge (see Figure G.1-G.5). Yet, there were no consistent interactions between any of the other Big Five traits and political knowledge. However, close inspection of the interactions suggest that they are not necessarily in line with the aforementioned literature. In this study we want to refrain from post hoc explanations why we fail to find a consistent pattern between the other Big Five traits and political knowledge. Future research should study the interaction between personality and political sophistication in greater detail.

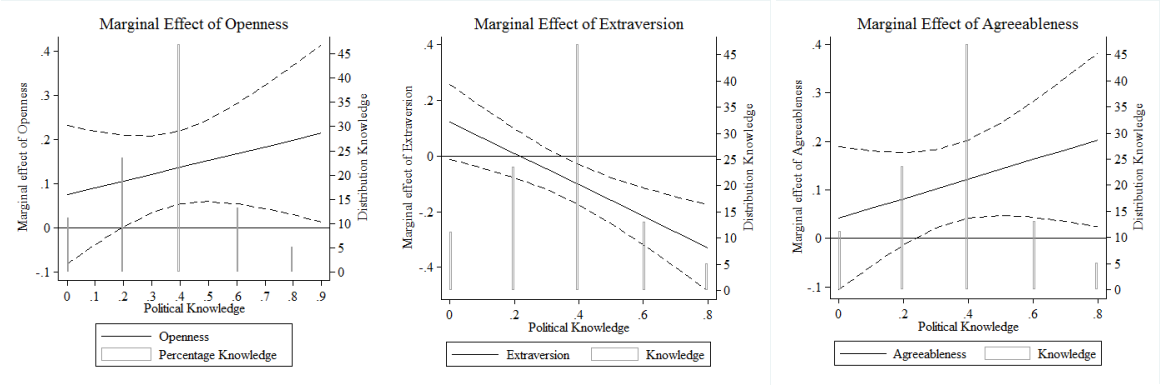


**Table G.1.** Personality X Political Knowledge.

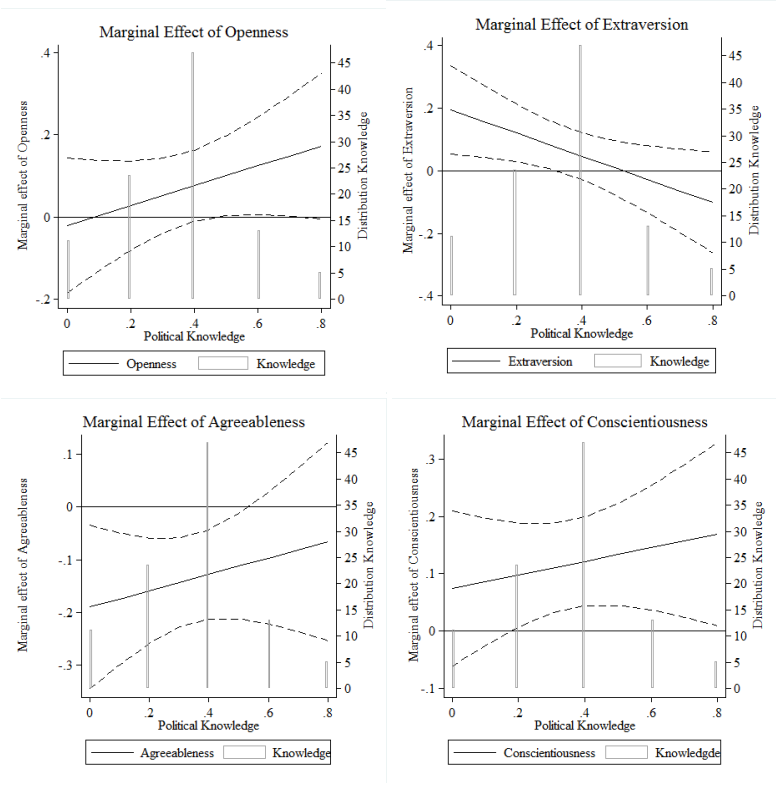
	Widening	Deepening	Trust	Identity	Negative Affect
Openness	0.08 (0.08)	-0.02 (0.08)	-0.11 (0.06)	-0.22* (0.07)	0.09 (0.08)
Conscientiousness	0.07 (0.07)	0.07 (0.07)	0.02 (0.05)	-0.07 (0.06)	-0.12 (0.07)
Extraversion	0.12 (0.07)	0.19* (0.07)	0.12* (0.06)	0.12 (0.06)	-0.06 (0.07)
Agreeableness	0.04 (0.08)	-0.19* (0.08)	-0.05 (0.06)	0.05 (0.07)	-0.04 (0.08)
Neuroticism	0.14* (0.06)	0.09 (0.07)	0.09 (0.05)	0.05 (0.06)	0.19* (0.07)
Political Knowledge	0.24 (0.19)	-0.20 (0.20)	-0.27 (0.16)	-0.30 (0.17)	0.12 (0.20)
<b>Interactions</b>					
Openness * Knowledge	0.15 (0.18)	0.24 (0.19)	0.33* (0.14)	0.56* (0.16)	-0.36 (0.19)
Conscientiousness * Knowledge	-0.18 (0.15)	0.12 (0.16)	0.14 (0.12)	0.16 (0.14)	0.10 (0.16)
Extraversion * Knowledge	-0.56* (0.16)	-0.37* (0.17)	-0.27* (0.13)	-0.15 (0.15)	0.17 (0.17)
Agreeableness * Knowledge	0.20 (0.18)	0.15 (0.19)	0.16 (0.15)	-0.24 (0.16)	0.10 (0.19)
Neuroticism * Knowledge	-0.03 (0.15)	-0.02 (0.15)	-0.16 (0.12)	-0.01 (0.13)	-0.32* (0.15)
<b>Covariates</b>					
Sex	-0.01 (0.01)	-0.00 (0.01)	0.02 (0.01)	0.03* (0.01)	-0.01 (0.01)
Age	0.00 (0.00)	0.01* (0.01)	-0.00 (0.00)	-0.00 (0.00)	-0.01 (0.01)
Education	0.02* (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.02* (0.00)
Income	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Government Approval	0.18* (0.03)	0.19* (0.03)	0.32* (0.03)	0.19* (0.03)	-0.23* (0.03)
Economic Outlook	0.16* (0.04)	0.14* (0.04)	0.30* (0.03)	0.23* (0.03)	-0.35* (0.04)
Political Interest	0.03 (0.03)	0.10* (0.03)	0.09* (0.02)	0.11* (0.02)	0.02 (0.03)
Anti-immigrant	-0.11* (0.03)	-0.11* (0.03)	-0.14* (0.02)	-0.11* (0.03)	0.14* (0.03)
National identity	-0.08* (0.03)	-0.16* (0.03)	-0.11* (0.03)	-0.06* (0.03)	0.17* (0.03)
Constant	-0.00 (0.09)	0.19* (0.09)	0.18* (0.07)	0.22* (0.08)	0.55* (0.09)
N	1174	1174	1174	1174	1174
R <sup>2</sup>	0.21	0.16	0.41	0.21	0.31
F-test of interaction	2.92*	<i>ns</i>	2.79*	2.88*	<i>ns</i>

\*p&lt;0.05

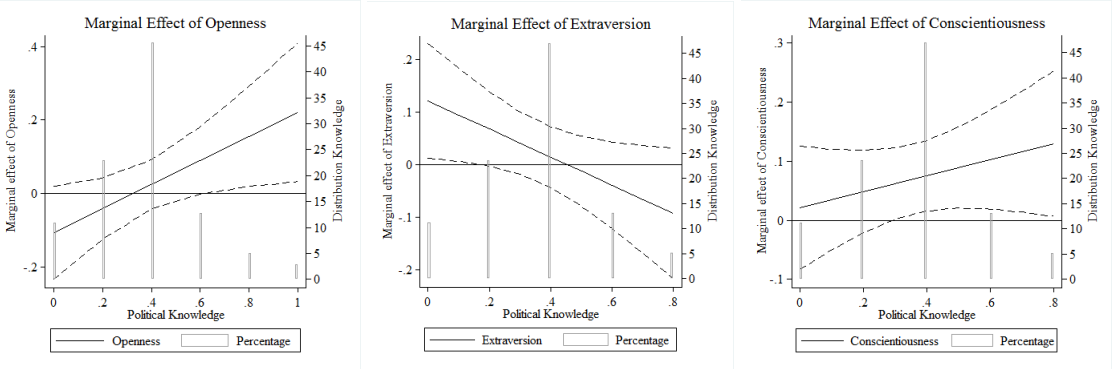
**Figure G.1.** Marginal effect of Personality traits on *attitudes towards Widening* of the EU over the range of Political Knowledge.



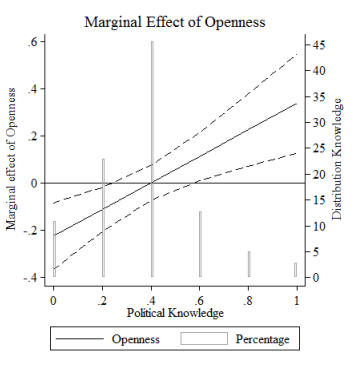
**Figure G.2.** Marginal effect of Personality Traits on *attitudes towards Deeping* of the EU over the range of Political Knowledge.



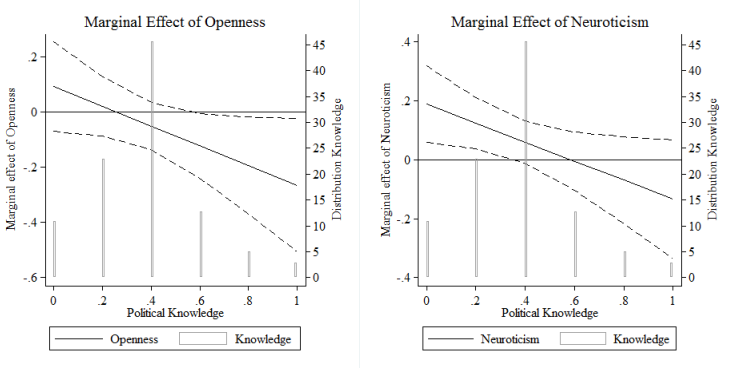
**Figure G.3.** Marginal effect of Personality traits on *trust* in the EU over the range of Political Knowledge.



**Figure G.4.** Marginal effect of Openness on *identification* with the EU over the range of Political Knowledge.



**Figure G.5.** Marginal effect of Openness and Neuroticism on the *Negative Affect* experienced towards the EU over the range of Political Knowledge.



## References

- Baldasaro RE, Shanahan MJ and Bauer DJ (2013) Psychometric properties of the mini-IPIP in a large, nationally representative sample of young adults. *Journal of Personality Assessment* 95(1): 74–84.
- Bullock JG, Green DP and Ha SE (2010) Yes, but what's the mechanism? (don't expect an easy answer). *Journal of Personality and Social Psychology* 98(4): 550–558.
- Cooper AJ, Smillie LD and Corr PJ (2010) A confirmatory factor analysis of the Mini-IPIP five-factor model personality scale. *Personality and Individual Differences* 48(5): 688–691.
- Donnellan MB, Oswald FL, Baird BM, et al. (2006) The mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment* 18(2): 192–203.
- Duckitt J and Sibley CG (2014) Personality, ideological attitudes, and group identity as predictors of political behavior in majority and minority ethnic groups. *Political Psychology*. Epub ahead of print 2 July 2014. DOI: 10.1111/pops.12222.
- Gallego A and Pardos-Prado S (2014) The big five personality traits and attitudes towards immigrants. *Journal of Ethnic and Migration Studies* 40(1): 79–99.
- Gerber AS, Huber GA, Doherty D, et al. (2011) Personality traits and the consumption of political information. *American Politics Research* 39(1): 32–84.
- Imai K, Keele L, Tingley D, et al. (2011) Unpacking the black box of causality: Learning about causal mechanisms from experimental and observational studies. *American Political Science Review* 105 (4): 765–789.
- Jost JT, Federico CM and Napier JL (2009) Political ideology: Its structure, functions, and elective affinities. *Annual Review of Psychology* 60: 307–337.
- Leone L, Chirumbolo A and Desimoni M (2012) The impact of the HEXACO personality model in predicting socio-political attitudes: The moderating role of interest in politics. *Personality and Individual Differences* 52(3): 416–421.
- Mondak JJ and Halperin KD (2008) A framework for the study of personality and political behaviour. *British Journal of Political Science*, 38: 335–362.
- Osborne D and Sibley CG (2012) Does personality matter? Openness correlates with vote choice, but particularly for politically sophisticated voters. *Journal of Personality* 46(6): 743–751.
- Osborne D and Sibley CG (2015) Within the limits of civic training: Education moderates the relationship between openness and political attitudes. *Political Psychology* 36(3): 295–313.