Personality and Euroscepticism

The impact of Personality on Attitudes Towards the EU

Nielsen, Julie Hassing

Published in: Journal of Common Market Studies

DOI: 10.1111/jcms.12381

Publication date: 2016

Citation for published version (APA):
"Personality and Euroscepticism: The impact of Personality on Attitudes Towards the EU"*

**Running head:** Personality and Euroscepticism

**Keywords:** Experiment; Big Five Personality Traits; Euroscepticism; Public Opinion; Euroscepticism

**Author:** Assistant Professor Julie Hassing Nielsen, University of Copenhagen

**Contact:** Julie Hassing Nielsen jhn@ifs.ku.dk

---

*Acknowledgements: I received helpful comments from Ian Manners (University of Copenhagen), Robert Klemmensen (University of Southern Denmark), Mark Franklin (The European University Institute and Massachusetts Institute of Technology), Laurie Beaudonnet (University of Montreal), and Peter Nedergaard (University of Copenhagen) as well as a panel on Euroscepticism and EU attitudes at the Midwest Political Science Association Annual Meeting (MPSA), April 2014. Invaluable research assistance was provided by Bergliot Borg Christensen. Centre for European Politics at the University of Copenhagen generously sponsored the survey questionnaire.
Abstract: Attitudes towards EU integration are widely studied. Yet, we only know little about the role of personality for EU attitudes. Utilising a framing experiment, encompassing positive and negative frames of EU integration, this article reports on how personality influences attitudes towards EU integration, and how personal predispositions moderate framing effects, impacting EU attitude formation. The study relies on Danish and Swedish data (N=1808). I test both the direct impact of personality on EU attitudes, and personality’s moderating impact on framing effects. I find that extraversion and openness positively correlate with positive EU attitudes, while people scoring high on neuroticism tend to support the EU less. Furthermore, I find that personality moderates different EU frames. Individuals with certain personality traits are more influenced by framing effects than others, while positive and negative frames also are perceived differently according to personal predisposition. I find only little country differences between Denmark and Sweden.

Introduction

Attitudes towards the EU integration are intensively studied. Consequently, we have extensive insights into the mechanisms that drive attitudes towards the EU (e.g., Anderson, 1998, McLaren, 2007, Karp et al., 2003, Usherwood and Startin, 2013). However, little attention is devoted to the psychology of EU attitudes. Although political psychology has risen to stardom recently, it has barely entered the realm of EU studies (for more on psychology and EU studies see Manners, 2014). The psychological branch of political science shows how personality explains, for example, attitudes and ideology (e.g., Mondak and Halperin, 2008, Gerber et al., 2011), and relates to political news
attentiveness, knowledge, and efficacy (e.g., Mondak, 2010). These dimensions are salient in an EU context to make politics work.

This article bridges the gap between explorations into the role of personal predispositions for attitude formation and the work on attitudes towards EU integration. It explores the direct effect of personality on EU attitudes and how different EU frames moderate the effect of personality on EU attitudes. This latter focus provides a more realistic picture of how personal predispositions moderate framing effects in real life. As emphasised elsewhere, personality should be understood in the context in which it operates as the effect of different political frames, for example, is contingent upon individual level characteristics (Mondak et al., 2010, Mondak, 2010). Political attitudes are partly determined by personality traits. Thus, the complexity of personality traits and their political role is best appreciated as an interactive relationship (Mondak, 2010, p. 110).

This research is timely. We know that personality determines individuals’ attitude formation and political behaviour (e.g., Schoen, 2007, Gerber et al., 2010, Gerber et al., 2011); more than ever, it is important to grasp what determines EU attitude. Although Euroscepticism has been researched in past decades (e.g., Hobolt, 2009), the events of the Eurozone crisis accelerated the debate about EU integration, linking the crisis to the study of Euroscepticism (e.g., Usherwood and Startin, 2013). Encompassing a new explanation of EU attitude formation, this article provides insights into how people navigate contemporary European politics. Furthermore, recent studies on framing effects show that the framing of political messages does indeed affect attitudes towards European integration (e.g., Lecheler and Vreese, 2010). This study builds on these findings.
To measure personality, I apply the most commonly used personality instrument the Big Five personality instrument (henceforth B5) – encompassing five personality traits: extraversion, openness, agreeableness, consciousness and neuroticism (e.g., Costa and McCrae, 2009). Using the 10-item battery, I report on a survey experiment with six different EU frames on a representative subset of the Danish and Swedish populations (N=1808). Hence, I test both the direct effect of personal predispositions on EU attitudes, and the moderating effect of B5 traits on EU attitudes, depending on the framing treatment.

**EU attitudes and the role of personality**

Although political theories of opinion formation emphasize the importance of individual predispositions (Zaller, 1992, Converse, 1964), the theoretical link between personality and politics is underdeveloped (e.g., Greenstein, 1971, Mondak, 2010). The pioneering work of Mondak (2010) manifested that personality affects political information, knowledge, discussion-eagerness, ideology and participation (Mondak, 2010). Following his work, we now know that B5 traits explain attitude formation on salient policy fields, such as immigration (Gerber et al., 2010, Gerber et al., 2011), foreign policy (Schoen, 2007), presidential performance (Rubenzer et al., 2000), and voting behaviour (Schoen and Schumann, 2007). Furthermore, B5 traits explain patterns of political discussion (Hibbing et al., 2011) and predict social worldviews and ideology (Sibley and Duckitt, 2009).

Although Euroscepticism has been an increasingly explored field (e.g., Usherwood and Startin, 2013), the pertinent role of personality as an explanation has
hitherto been largely ignored. From the voluminous amount of research, we possess extensive insights into EU attitudes formation. Opinions are largely formed based on domestic politics (Anderson, 1998), although politically aware individuals evaluate EU politics independently from national politics (Karp et al., 2003, McLaren, 2007). Economic calculations (Karp et al., 2003) and egocentric utilitarianism play a role in EU support (McLaren, 2007). Others argue that community identity is stronger than economic calculus when explaining EU attitudes (Hooghe and Marks, 2005), in which the strength of partisan context (Gabel, 1998), national identity and democratic concerns also influence EU views (Gabel and Hix, 2005). Furthermore, feelings of a lack of representation affect support for the European enterprise (Rohrschneider, 2002).

To my knowledge, only one recent study on the effect of B5 traits on EU attitudes exists (Bakker et al., 2015). Exploring five dimensions of EU attitudes as an outcome variable (i.e., support for widening and deepening the EU; trust in the EU; identification of the EU and negative experience of the EU), the study concludes that B5 traits are the antecedent of a diverse set of EU attitudes. I rely on these results later, when deducing my hypotheses. However, Bakker et al. do not explore how personality moderates, for example, framing effects when exposed to EU news. Furthermore, the study includes only Dutch data. My article explores whether the direct effect of personality on EU attitudes is robust across countries and contextualizes the study, exploring the moderating effect of personality traits on framing effects. It does so because it has been shown strongly elsewhere that the expression of personality effects are typically situational (Mondak et al., 2010, p. 87).
Studies of media framing effects show that contextual news frames or campaign ads shape perceptions of politics (e.g., Slothuus and Vreese, 2010, Druckman, 2001a, Druckman et al., 2011). Zaller famously noted that personal predispositions shape responses to context stimuli (Zaller, 1992), causing Chong and Druckman (2007) to suggest a psychological model for understanding the effect of framing effects (Chong and Druckman, 2007b).

A number of studies identify moderating variables that condition framing effects. These variables include, in particular, individual predispositions, such as political values (e.g., Slothuus, 2008), whereas some find political knowledge conditions framing effects (For more here see Chong and Druckman, 2007b). Other psychological moderators on framing effects include cultural values (e.g., Chong, 2000). Chong and Druckman (2007) argue that strong predispositions reduce framing effects by increasing resistance to disconfirming information (Chong and Druckman, 2007b, pp. 112). Hence, we can expect that framing effects are not moderated only by individual-level predispositions. The strength to which the frames are moderated depends on the intensity of particular individual-level predispositions. This way I expect a situational heterogeneous effect of personality traits when exposed to similar frames (Mondak et al, 2010: 90).

Anti-EU media framing discourse contributes to embedded Euroscepticism (e.g., Usherwood and Startin, 2013, p. 10, Lecheler and Vreese, 2010). For example, frames stressing the risks associated with EU integration make individuals less likely to support EU integration (Schuck and de Vreese, 2006). An experiment framing the EU as a "cultural threat" or emphasizing its "democratic deficit” shows that both frames lead to less EU support (Abbarno and Zapryanova, 2013). Furthermore, exposure to different
news frames affects the understanding of EU enlargement (Lecheler and Vreese, 2010). Finally, media evaluation of the EU affected Eurosceptic voting in the 2009 European Parliament election (Spanje and Vreese, 2014).

In summary, we know that personality matters for political attitude formation. We know that political attitudes are pliable according to personal predispositions, but they are also formed based on media framing. This study builds on these findings when deducing the hypotheses in the next section.

**How personality relates to EU attitudes**

Here, I present hypotheses about how B5 traits are expected to relate to EU attitudes and, more specifically, how negative and positive EU frames may moderate these relationships. Importantly, personality traits are not understood as determining political attitudes. Rather, personality – along with a set of factors – shapes responses to the stimuli individuals encounter (e.g., Mondak, 2010).

I rely on previous empirical conclusions to develop the hypotheses. For each of the five character traits, I make predictions about both the direct effect on EU attitudes and the indirect effect in conjunction with the framing effects. I state expectations about both whether a personality trait is more prone to be influenced by frames, in general, and whether the positive or negative frames may affect a particular trait more.

The EU framing treatments introduced in a later section encompass positive and negative aspects of EU integration. We know that negative and positive political frames are received asymmetrically. Negative frames – *ceteris paribus* – affect people’s attitudes
towards a particular policy field more than positive frames do (e.g., Soroka, 2006, Ito et al., 1998, Rozin and Royzman, 2001). Hence, I expect negative frames to have a stronger moderating effect on all personality traits on EU attitudes than positive frames.

\[ H_1: \text{Negative frames affect EU opinions more strongly than positive frames.} \]

I expect that extraversion is positively related to EU attitudes. Extraversion is measured by the respondents’ self-placement on two items: (1) extraverted and enthusiastic, and (2) reserved, quiet. Extraverted people are more politically involved. They are prone to seek new information and challenge old beliefs, and they are more adaptable. Previous research finds that extraverts tune more into news and are more opinionated, outgoing and interactive with political society (Mondak, 2010, pp. 57, 119). Since extraverted individuals are more adaptable to political changes, I expect, in line with Bakker and Vreese (2015) that extraverted individuals are more inclined to support the ever-changing nature of the EU.

\[ H_{2a}: \text{Extraversion positively correlates with positive EU attitudes.} \]

I expect highly extraverted individuals to be more easily influenced by news framing because they are more frequently exposed to news and participate more in political discussions (e.g., Mondak, 2010). Furthermore, following \( H_{2a} \), I expect highly extraverted individuals to react more strongly to positive frames. Research on cross-cutting opinion exchanges show that individuals tend to seek opinions already in line with their understanding of the world (e.g., Mutz, 2006). Furthermore, we know that
strong predispositions reduce framing effects by increasing resistance to disconfirming information (Chong and Druckman, 2007b, pp. 112). Hence, I expect the following:

$H_{2b}$: Extraverted individuals are more easily influenced by framing effects, particularly positive frames.

I expect neuroticism to correlate negatively with the wish for more EU integration. Neuroticism (also Emotional stability) is tapped by the two items: (1) anxious and easily upset and (2) calm and emotionally stable. Neurotic individuals are easily upset by changes and instability (Mondak, 2010, pp. 61, 63). The EU is characterized by institutional instability and change, affecting identity creation (e.g., Cram, 2009). Knowing that identity is a strong predictor explaining EU attitudes (e.g., Hooghe and Marks, 2005, Gabel and Hix, 2005) and that identity affects personality, I expect neurotic people to be less susceptible to EU identity adaptation. Consequently, they support EU integration less. This assumption finds support in recent research showing that neuroticism negatively affects affect towards the EU (Bakker et al., 2015, p. 10).

$H_{3a}$: Neuroticism inversely correlates with positive EU attitudes.

Research finds evidence for less media use by neurotic individuals (Mondak, 2010, p. 96). Hence, I expect neurotic individuals to be less susceptible for news framing in general. Furthermore, as argued above, research shows that individuals are biased to seek out information supporting their a priori views (Mutz, 2006), and particularly receptive to frames supporting their view (Chong and Druckman, 2007a). Hence, following $H_{3a}$, I expect highly neurotic individuals to be more susceptible to negative EU news frames.
$H_{3b}$: Neurotic individuals are less easily influenced on their EU attitudes. When influenced, they are more susceptible to negative frames.

I expect a positive relationship between openness to experience (henceforth openness) and EU support. The two items captured by openness are the respondents’ self-placement on (1) open to new experiences, possess many different sides and (2) traditional, not particularly creative. Openness is associated with the ability to adapt to new political institutions, being attracted to new experiences. Open individuals like exposure to different cultures and are more politically aware (Mondak, 2010, pp. 48,50). European integration is characterized by new governance structures and the integration of difference cultures. Furthermore, openness is positively associated with support for the widening of the EU in the Netherlands (Bakker and Vreese, 2015, p. 9).

$H_{4a}$: Openness positively correlates with positive EU attitudes.

Because openness is associated with an intrinsic attraction to new experiences and openness to media news and opinion changes, I expect open individuals to be more influenced by news frames, in general. Furthermore, following $H_{4a}$, I expect highly open individuals to be more prone to react to positive frames. As emphasized above, strong predispositions increase resilience to alternative arguments (e.g., Mutz, 2006), encompassing framing effects with contrasting information (Chong and Druckman, 2007b, pp. 112).

$H_{4b}$: Open individuals are more easily influenced by EU media frames, particularly positive frames.
I expect a positive relationship between conscientiousness and EU support. The two items capturing conscientiousness are the respondents’ self-placement on (1) dependable and self-disciplined, and (2) disorganized and careless. Conscientiousness is associated with dependability and reliability. Conscientious individuals favour the status quo and are more traditional and politically conservative (Mondak, 2010, pp. 51,54). We have mixed findings about conscientiousness. Schoen (2007) finds that highly conscientious Germans express less preference for international cooperation (Schoen, 2007). However, Bakker and Vreese (2015) conclude that conscientiousness positively predicts support for deepening the EU and trust in the EU. Hence, I expect the following:

\[ H_{5a}: \text{Conscientiousness positively correlates with positive EU attitudes.} \]

Highly conscientious individuals have a low level of political knowledge, and they strive to maintain homogeneity in their social network to avoid exposure to disagreement (Mondak, 2010, pp. 111, 116). Hence, I expect them to be less influenced by EU frames in general. Conscientious individuals have shown less political interest, have a low level of knowledge, and prefer non-conflictual opinion-exchanges in heterogeneous networks. Therefore, following \( H_{5a} \), I expect framing effects, when influential, to be strongest for positive frames.

\[ H_{5b}: \text{Conscientious individuals are less influenced by EU frames. When influenced, they are susceptible to positive frames.} \]
Finally, I expect that agreeable individuals are more supporting of the EU. The two items capturing agreeableness are the respondents’ self-placement on (1) argumentative and critical and (2) sympathetic and warm. Agreeableness is associated with dependability and high degrees of reliability. Agreeable individuals desire positive relations with others, and they tend to avoid conflicts (Mondak, 2010, pp. 58). Mixed evidence exists concerning the effect of agreeableness on political attitudes (Mondak, 2010, pp. 60). However, in a European context, agreeable Germans support international cooperation (Schoen, 2007), whereas agreeable Dutchmen support widening of the EU (Bakker and Vreese, 2015, pp. 9). Hence, I predict the following relationship:

$H_{6a}$: Agreeableness positively correlates with EU attitudes.

Highly agreeable individuals tend to prefer less conflict exposure and thrive in homogeneous societal groups (Mondak, 2010). However, we also know that individuals scoring high on agreeableness tend to be more positive towards international cooperation (Schoen, 2007) and the EU (Bakker and Vreese, 2015). Consequently, I have no a priori expectations about whether agreeable individuals are more or less prone to obtain media frames. Following $H_{6a}$, I expect highly agreeable individuals to be more susceptible to positive frames.

$H_{6b}$: Agreeable individuals are more influenced by positive EU frames.

**Cases**

Denmark and Sweden are excellent cases to study Euroscepticism. It was the Danish “no” vote on the Maastricht Treaty (1992) that sparked the discussions about popular
Euroscepticism (e.g., Hobolt, 2009, Hobolt, 2012, Franklin et al., 1995, Lawler, 1997). Later, both countries rejected full Euro membership (e.g., Jupille and Leblang, 2007). Today, Denmark maintains three opt-outs of salient EU areas. Euroscepticism is a persistent phenomenon in both countries (e.g., Usherwood and Startin, 2013). It was organized in Denmark during early EC membership in 1972. Sweden joined the Union in 1995 and only recently witnessed party-based Euroscepticism. Both countries have strong Eurosceptic parties (Raunio, 2007).

The Danes and Swedes are best characterized as soft Eurosceptics (e.g., Raunio, 2007). They are devoted European pragmatists (e.g., Schuck and Vreese, 2013, Knudsen, 2008), a fact highlighted consistently by Eurobarometer data, showing strong support for EU membership, even in times of crisis (Author’s own work, forthcoming). Recently, Euroscepticism has been tied to the evolution of the EMU (Usherwood and Startin, 2013, Hobolt and Leblond, 2014, Ioannou et al., 2015), resulting in the overwhelming success of Eurosceptic parties in the latest European Parliament election (2014). Additionally, Denmark and Sweden witnessed increased Euroscepticism in the recent national elections (Author’s own work).

Denmark and Sweden resemble each other in many ways. They are both universal welfare states, encompassing high levels of social capital, political legitimacy and trust (e.g., Rothstein and Eek, 2006, Rothstein and Stolle, 2008, Gilley, 2006). Being high redistribution societies, I expect personal predispositions such as altruism (i.e., a sub-concept under agreeableness) to be high. Furthermore, I expect individuals to score highly on openness and extraversion, correlating strongly with trust (e.g., Freitag and Ackermann, 2015). These perspectives may affect the generalizability of the results.
Much of Scandinavian Euroscepticism centres around the welfare state (Raunio, 2007, p. 204-205). However, welfare does not account for identification alone. At the heart of the Scandinavian worldview lies a positive model of the internationalist state (Lawler, 1997, p. 568). Here, Sweden is famously known for adopting neutrality. Denmark, in contrast, maintains foreign policy activism (Lawler, 1997, pp. 568-569).

There are many similarities between the two countries. I replicate the study primarily to explore the robustness of the results. Cross-country similarities and differences concerning the effect of personality trait on political vote choice have been found in earlier studies (Vecchione et al., 2011). Vecchione et al. included a set of heterogeneous countries, whereas this present study includes two homogeneous cases.

\[ H_{7a}: \text{There are no significant differences between Denmark and Sweden encompassing the direct or indirect effect of personality on EU attitudes.} \]

**A survey experiment on the role of personality in EU attitudes**

I use data from a survey experiment. Based on a media content analysis in Denmark and Sweden encompassing all broadsheet national newspapers between 2008 and 2013, I deduce 6 EU news frames, anchoring the frames in contemporary news (Author’s own work). These frames are so-called emphasis frames, emphasizing certain EU aspects (e.g., Druckman, 2001b). The first negative frame (Greece) presents the commonly depicted stereotype of the “hardworking German” vis-à-vis the “lazy Greek”. The second (Welfare) emphasizes the negative aspects of welfare tourism, whereas the last frame (Negative Culture) focuses on the differences in political culture between the scandalous
and corrupt Mediterranean culture vis-à-vis the less corrupt and scandalous Northern political culture. Each frame is asked on an interval measure. The frame variables are included as a dummy in the analysis (i.e., whether subjects received the particular frame).

The first positive frame (Peace) emphasizes the peacekeeping mission of the EU, highlighting its receipt of the Nobel Peace Prize (2012). The second positive frame highlights the common European culture aspect (Positive Culture), whereas the last (Economy) highlights the economic benefits of the EU, stressing its ability to compete against global economies. All negative and positive frames emphasize aspects of the Euro Crisis. Using the same policy content but highlighting different pro and con arguments, I expect stronger treatment effects because these aspects were salient in 2013, and the Euro constitutes a symbolic creation of a European polity, affecting individual identity creation (e.g., Cram, 2009).

Importantly, this study does not report on the framing effects per se. Rather, the frames serve as a more realistic exploration of B5 traits’ explanatory power on EU attitudes because we cannot expect personal predispositions to occur in a vacuum. Rather, they are triggered by contextual circumstances (e.g., Mondak and Halperin, 2008, Gerber et al., 2010). Because the frames are built on frequently used news frames, the findings can be generalized to real-world politics, although I do not imply that I have covered all possible EU news frames. However, the realistic setting here imposed by randomly assigning frames that are deduced from actual news reporting provides a crucial stepping-stone, assessing the role of personality traits in real-world politics.

Most studies on psychological traits use the B5 framework. (e.g., Mondak, 2010, Mondak and Halperin, 2008, Gerber et al., 2010). The B5 traits consist of a hierarchical
model with five broad factors. Each factor has a bipolar counterpart, and each summarizes several sub-factors. The B5 traits are captured with different instruments, ranging from the extensive 60-item NEO-Five Factor Inventory (NEO-FFI) (e.g., McCrae and Costa jr, 1999, Mondak, 2010, Mondak and Halperin, 2008, Costa and McCrae, 2009) to the less extensive 5-10 item instruments developed based on comprehensive schemes (Gosling et al., 2003). I use the 10-item instrument. Although there are trade-offs in using a less extensive instrument that may compromise nuances and accurateness, benefits are also obtained. Most importantly, a less comprehensive instrument ensures that respondents do not leave the survey prematurely (e.g., Carney et al., 2008, Gerber et al., 2010). The Gosling et al. 10-item instrument is thoroughly tested and widely used (Muck et al., 2007).

**Research design and data**

I report on a survey experiment in Denmark and Sweden (N=904 for each country). Data are collected as a web survey encompassing a representative set of the population based on age, gender and education because these attributes repeatedly show an effect on attitude formation (e.g., Schoen, 2007 pp. 409). The survey was conducted by YouGov and fielded in October 2013.

The six different frames were randomly assigned to a sub-set of respondents (N=100 for each frame). The survey employed a between-subject design, in which each respondent received only one of the six frames or was allocated into the non-treated control group (N=300 in each country). The strength of this experimental design is that it induces exogenous situational variation, allowing us to measure how personality
moderates the framing effect while holding everything else constant. The framing treatments free us from relying on self-reported interpretation of situational stimuli, which can be influenced by personality traits (e.g., Druckman et al., 2011).

Table 1 provides the descriptive statistics (see online appendix). As seen, the randomization maintained gender balance and age (and education, which is not included in the analysis). Also the respondent’s self-placement on a traditional left-right political scale (0=left and 10=right) is balanced.

**Descriptive statistics and models**

The dependent variable is attitude towards EU integration. I use the standard item found in the European Social Survey, measuring EU attitude on an interval scale; “Some say European unification should go further. Others say it has already gone too far. From a scale from 0-10 where 0 represents “integration has gone too far” and 10 “integration should go further”, what number on the scale best describes your position?” The dependent variable was tapped after the framing treatments. See Table 2 for the distribution of answers for the framing questions.

Each personality trait consists of four concepts divided into two items representing each end of a bipolar scale. The mean of self-placement on each item is found in Table 3. The distribution of answers does not significantly differ between Denmark and Sweden. To maintain the bipolar scale dimension, each personality trait is

---

1 [insert url] online appendix

2 [insert url] online appendix
coded between -6 to 6, where 6 is ranking very high on the particular trait, and -6 is scoring very low.

(Table 3)

I test three models using OLS regression estimation. Model 1 reports the effect of B5 traits on EU attitudes. Model 2 tests the direct and moderating effect of country on the relationship between personality and EU attitudes. Finally, Model 3 adds the framing treatments as controls and explores the frames’ moderating effect on the relationship between personality and EU attitudes. Model 3 also includes gender, age and voting behaviour as controls because these attributes have shown significant effect in previous studies (Schmitt et al., 2008, pp. 142, Mondak, 2010, pp. 162). Finally, I include respondents’ self-placement on a political left-right scale because previous studies show that personality strongly determines ideology (Mondak, 2010, pp. 128).

Results

Table 4 provides the results. Model 1 shows that none of the personality traits significantly affects EU attitudes. However, both extraversion and openness have the hypothesized positive relationship with EU attitudes. Although not significant, the relationship is nevertheless consistent across the three models. Furthermore, as expected, neuroticism is consistently inversely related to EU support. This relationship is significant (p<0.1) in Model 3. Conscientiousness and agreeableness, however, show both positive and negative correlations with EU attitudes (Model 1-3). Although I
identify only one significant relationship between the B5 traits and EU attitudes, we nevertheless observe the predicted correlational relationships from \( H_{2a} \), \( H_{3a} \), and \( H_{4a} \), whereas \( H_{5a} \) and \( H_{6a} \) are only partly verified because results are diverging.

(Table 4 – the full models are in Table 4 online appendix in final printed version)

Model 2 reports the country findings. As expected in \( H_{7a} \), there are no significant differences between the two countries, either when country is included as a control or as an interaction with personality traits. Model 3 includes the frames, and each frame interacted with each personality trait. Furthermore, the model includes the controls. Interestingly, no gender effect is found, contrasting with previous research, in which women are less EU-positive than men (e.g., Pepermans and Verleye, 1998). None of the controls significantly affects EU attitudes.

Model 3 shows that the framing effects affect subjects in the hypothesized directions. The negative Greece and Welfare frames provide a negative effect on EU attitudes vis-à-vis the non-treated baseline group, whereas the positive treatments all show a positive correlation with EU attitudes. One important difference, however, is that the Negative Culture frame surprisingly yields a significantly positive effect. Because this frame does not perform as expected, leaving the results hard to interpret, it is omitted from the analysis.

Models 2 and 3 report the interaction effects between the country dummy and personality traits (Model 2) and the framing effects and personality traits (Model 3). To interpret these effects correctly (e.g., Brambor et al., 2005), I graph each interaction
effect with 95% confidence intervals (graphs not reported). Although I do not find any significant moderating country effects, Denmark and Sweden nevertheless show different results. As reported in Figures 1 and 2, highly conscientious Swedes are slightly more EU positive vis-à-vis Danes, whereas the opposite relationship (in concordance with $H_{5a}$) is true (see online appendix). Conversely, and contrary to my predictions in $H_{4a}$, Figure 3 illustrates that openness in Sweden is inversely correlated with positive EU attitudes. In Denmark, however, openness correlates positively with positive EU attitudes as predicted. I discuss these results later.

Finally, Model 3 reports on the interaction effects of the frames on personality traits. In Figures 3-15 below, I report the findings, in which the non-treated baseline and the treatment group yield different directional results with respect to their effect on EU attitudes. I report these findings because there is no significantly different effect between the treatment groups and the non-treated baseline in any of the interaction models.

(Figure 3-15)

Figure 3-5 shows the interaction effects between the frames and extraversion. We see that $H_{2b}$ is partly verified in Figures 3 and 4, in which highly extraverted individuals are much more prone to alter their opinion after receiving the negative EU frames (i.e., Greece and

---

3 [insert URL] online appendix
Welfare) than individuals ranking low on extraversion. Surprisingly, however, the positive Economy frame particularly affects individuals low on extraversion.

Figures 6–9 report the findings on the moderated relationship between agreeableness and framing effects on EU attitudes. Hypothesis H6b is partly verified. The negative Greece and Welfare frames primarily affect individuals low on agreeableness, whereas they have a surprisingly minor positive effect on highly agreeable individuals. The actual framing content could offer an explanation. The negative Greece frame portrays the hardworking German vis-à-vis the lazy Greeks, whereas the Welfare frame emphasizes the different EU welfare regimes. Agreeable individuals rank highly on traits such as being sympathetic and warm. Hence, highly agreeable individuals may expose more cross-national solidarity and actually become more EU-positive when reminded about Greek fiscal problems or welfare inequality. Finally, Figures 8-9 shows that the positive Peace and Economy frames, in congruence with H6b, have a much higher positive effect amongst the highly agreeable.

Figure 10 and 11 report on the interaction between conscientiousness and framing effects on EU attitudes. The framing effect reported is on two positive frames (i.e. Peace and Economy). Surprisingly, contrasting H5b, they show that less conscientious individuals are more impacted by the positive frames than highly conscientious individuals. This finding contradicts previous findings showing a positive relationship between conscientiousness and support for international cooperation and the EU (Bakker and Vreese, 2015, Schoen, 2007). One explanation may be that less conscientious individuals are also less politically conservative. They do not favor status quo to the same extent as the highly conscientious (Mondak, 2010). Hence, they might be more
supportive of a strong union in a changed world, which is emphasized by the Peace and Economy frames. This interpretation adds nuance to the more general finding of a positive correlation between conscientiousness and EU attitudes.

Figures 12-15 show the findings of openness moderated by framing effects. In $H_{4b}$, I expected that open individuals would be more influenced by frames, in general, and by positive frames, in particular. As seen, both the positive frames (i.e., Positive Political Culture and Economy) and the negative frames (i.e., Greece and Welfare) have a greater effect on open individuals vis-à-vis the non-treated baseline and individuals low on openness, confirming hypothesis $H_{4b}$. Yet, both the positive and negative frames have a negative influence on open individuals. It is not obvious why this is the case, and none of the framing content offers an immediate explanation on this finding.

In summary, whereas most frames interacting with personal predispositions did not yield any directional effect vis-à-vis the non-treated baseline, Figures 3-15 show that certain frames interacted with $B_5$ traits predict EU attitudes. Although none of these effects are statistically significant, we nevertheless observe how personality traits affect framing effects and in most cases even reverse the framing effects from positive to negative, depending on the strength of the personality trait. Additionally, I did not find support for a negativity framing bias ($H_1$). Of the 12 framing effects reported here (Figures 3-15), seven are negative frames, and six are positive frames. Table 5$^4$ in the online appendix summarises the findings and the hypotheses.

$^4$ [insert url] online appendix
Discussion and conclusion: personality, framing effects and EU attitudes

Research in EU attitudes has provided us with extensive knowledge about factors that play a role when forming opinions about the EU (e.g., Franklin et al., 1994, McLaren, 2007, Boomgaarden et al., 2011, Hobolt, 2012, Hooghe and Marks, 2007, Karp et al., 2003). This article adds to this work, exploring how personality play a role both as a moderating effect on different EU frames and as a direct effect on EU attitudes.

I consistently identified the predicted direct positive relationships for extraversion, openness and neuroticism on EU attitudes. However, the uneven patterns of conscientiousness and agreeableness leave these results less consistent. Although these results confirmed the expected directional pattern, only a few were statistically significant. I discuss below to what extent these results resemble similar results and how they leave room for further research.

The findings of the interaction effects were more nuanced. Highly extraverted, open and agreeable individuals were more prone to alter opinions after receiving frames, in general. However, which frames they were affected by diverged. Extraverted and open individuals were primarily affected by negative frames, whereas agreeable individuals were particularly affected by positive frames. Furthermore, as expected, conscientious and neurotic individuals were less affected by framing effects, in general. However, less-conscientious individuals were more influenced by positive EU frames than by negative frames, where the framing effects were as predicted for the least conscientious individuals. For neuroticism, I did not find any treatment effect vis-à-vis the non-treated baseline group. The nuances in framing effects according to personal predispositions indicate that framing effects indeed are asymmetrically perceived and are moderated by
personal predispositions. Finally, I did not find that individuals were particularly influenced by negative frames.

The study contributes to three sets of literature. First, it adds to the study of personality and politics, in general (e.g., Mondak, 2010, Mondak and Halperin, 2008, Carney et al., 2008, Gerber et al., 2011), and European politics, in particular (Bakker and Vreese, 2015, Schoen, 2007). Second, it contributes to the study of framing effects, in general (e.g., Slothuus, 2008, Slothuus and Vreese, 2010, Druckman, 2001a) and their effect on EU attitudes, in particular (e.g., Lecheler and Vreese, 2010). Finally, the study contributes to the study of Euroscepticism (e.g., Usherwood and Startin, 2013), particularly in Denmark and Sweden (e.g., Lawler, 1997, Raunio, 2007).

Personality affects political behaviour in various ways (e.g., Mondak, 2010, Hibbing et al., 2011, Carney et al., 2008, Schoen, 2007). Only one study examines the direct effect of personality on EU attitudes (Bakker and Vreese, 2015), although it is only on a Dutch sample, and only on the direct effect of personality traits and EU attitudes. It includes multiple parameters to measure EU attitudes. Here, I have one variable, which does not overlap with theirs. Hence, comparisons are limited. Still, some similarities are prevalent. Both studies find a positive correlation between openness and agreeableness and EU attitudes and a negative association between neuroticism and EU attitudes. However, because their study includes more dependent variables, their findings are also more nuanced.

Furthermore, although I found no significant country effects, minor differences existed between the two countries. For example, conscientious Swedes are slightly more
positive towards EU integration, contrasting Denmark. The mixed findings on conscientiousness echo the mixed findings in the literature (Schoen, 2007, Bakker and Vreese, 2015). It is less obvious why there should be differences between Denmark and Sweden here. The findings on conscientiousness needs further research as both the direct effects and the interaction effects are inconclusive.

Furthermore, open Swedes had an inverse relationship with positive EU attitudes; conversely, the open Danes lived up to the predicted positive view on EU integration. One explanation can be the differences between internationalism in Denmark and Sweden. Open individuals in neutral Sweden might be less EU supportive, whereas Denmark is characterized by active internationalism, emphasizing more EU integration. These discrepancies between the Danish and Swedish findings and the Dutch study justify more research on how differences in personality play a role cross-nationally in EU opinion formation. Such research should include additional dependent variables to tap the underlying dimensions of EU attitudes and more case countries to explore the generalizability of the results.

The study also contributes to the literature on framing effects, emphasizing how media frames shape political behaviour (e.g., Zaller, 1992, Slothuus, 2008, Slothuus and Vreese, 2010, Druckman, 2001a). It adds to these studies by showing that open, extraverted and agreeable individuals are more inclined to receive framing effects, whereas neurotic and conscientious individuals are less inclined to do so. These tendencies are particularly pertinent in times of crisis. During the Eurozone crisis, media attention was dominated by negative conflict frames. The frames here tested are deduced from real-life media frames (Author’s own work). Thus, we are closer to understand how
framing effects differ according to personal predispositions, and how these effects predicted EU attitudes during the Eurozone crisis. Knowing that anti-EU media discourse contributes to Euroscepticism (e.g., Abbarno and Zapryanova, 2013, Lecheler and Vreese, 2010), we can now add that framing effects differ according to personal predispositions, providing us with a better understanding of how framing effects affect EU opinion-formation in real life politics.

Finally, this article contributes to the study of Euroscepticism. Recent decades’ focus on Euroscepticism provides multiple explanations on Euroscepticism (e.g., Anderson, 1998, Karp et al., 2003, McLaren, 2007, Usherwood and Startin, 2013). However, EU opinions are largely formed based on either positive or negative media content. Hence, framing effects are pertinent to include when exploring how people shape EU opinions. As we witnessed here, personal predispositions moderate framing effects and, thus, affect EU attitude formation. Furthermore, personal predispositions seem to determine to what extent individuals are responsive to framing effects at all. These findings provide insights into how personal predispositions may determine why certain individuals change attitudes during, for example, the Eurozone crisis, in which they are more heavily exposed to critical EU news. Future research could extend these results, investigating whether personal predispositions play a role in, for example, the low voter turnout in the European Parliament (i.e. the second order election debate, e.g. Reif and Schmitt, 1980).

Context matters. Personality also depends on cultural context. Denmark and Sweden are extensive welfare states with high degrees of redistribution. Furthermore, they are known for soft Euroscepticism. As emphasized, these aspects could intervene
with the findings presented here and affect the generalizability of the result across cultural contexts. Furthermore, I do not claim to have covered all relevant ways of framing the EU. Rather, I developed a set of identified EU frames in the Danish and Swedish debate in 2008-2013, highlighting negative and positive dimensions of EU integration. I call for further investigations, both as European integration evolves and in recognition that real-world EU politics is more complex than presented here, and because we would obtain a better grasp of the role of B5 traits by exploring the effects of different frames.

Correlation is not causation. What I established here is correlation between certain psychological traits and their moderating and direct effects on EU attitudes. Thus, I emphasize that personality traits do not cause people to develop certain attitudes or perceive certain frames. Rather, the correlations and interaction effects are functions of an innate underlying inherited feature (Bakker and Vreese, 2015, p. 10-11). What we have witnessed here is that certain individual characteristics determine – in complex conjunction with media frames – how people perceive and feel about enhanced EU integration. Understanding what motivates political attitudes and how opinions are shaped is central to the study of EU integration. This article shows that personality matters and adds to our understanding of what shapes EU attitudes.
Bibliography


Source Book for the Study of Personality and Politics (Chicago: Markham Publishing Company).


Table 1: Descriptive Statistics: Denmark and Sweden

<table>
<thead>
<tr>
<th>Country</th>
<th>Age (average)</th>
<th>Gender (% female)</th>
<th>Political left-right scale (average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>46.3 (15.61)</td>
<td>49 %</td>
<td>5.8 (2.47)</td>
</tr>
<tr>
<td>Sweden</td>
<td>45.6 (15.52)</td>
<td>50 %</td>
<td>5.7 (2.42)</td>
</tr>
</tbody>
</table>

Note: “Don’t know” answers missing. (N= 1808). Standard errors in parentheses.
Source: Sweden and Denmark (2013)
Table 2: Framing Wording and Response Distribution: Denmark and Sweden (percent)

<table>
<thead>
<tr>
<th>“The Euro has been challenged in the past years...” “</th>
<th>Country</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>... “we often hear about how Greeks do not work as hard as, for example, Germans. On a scale from 0-10, to what extent do you think this is a problem? 0 indicates it is a big problem and 10 indicates it is not a big problem...”</td>
<td>DK</td>
<td>37</td>
<td>18</td>
<td>23</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SE</td>
<td>43</td>
<td>14</td>
<td>10</td>
<td>1</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>... “we often hear about welfare tourism, meaning the Danish welfare is threatened because EU citizens have access to welfare benefits like scholarships or unemployment benefits. (…)”</td>
<td>DK</td>
<td>37</td>
<td>15</td>
<td>8</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SE</td>
<td>20</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>15</td>
<td>6</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>... “we often hear how political cultural differences between the southern Mediterranean countries and the northern EU members are too big, particularly when it comes to the corruption and political scandals (…)”</td>
<td>DK</td>
<td>31</td>
<td>19</td>
<td>12</td>
<td>6</td>
<td>4</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>13</td>
<td>0</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SE</td>
<td>34</td>
<td>11</td>
<td>10</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>... “yet the EU received the Nobel Peace Prize (2012) due to its contribution to peace since WW2. On a scale from 0-10, where 0 is “It is a peace project” and 10 is “it is not a peace project” please. indicate your attitude.”</td>
<td>DK</td>
<td>10</td>
<td>13</td>
<td>10</td>
<td>9</td>
<td>10</td>
<td>5</td>
<td>7</td>
<td>11</td>
<td>1</td>
<td>25</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SE</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>17</td>
<td>7</td>
<td>11</td>
<td>8</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>... “yet the cultural ties between the Member States are strong due to the common history” (…)”</td>
<td>DK</td>
<td>3</td>
<td>12</td>
<td>13</td>
<td>7</td>
<td>20</td>
<td>6</td>
<td>13</td>
<td>9</td>
<td>3</td>
<td>15</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SE</td>
<td>3</td>
<td>7</td>
<td>8</td>
<td>10</td>
<td>17</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>... “yet the EU remains the world’s largest trading bloc, which is necessary to compete against global economies like China and India”(…)”</td>
<td>DK</td>
<td>12</td>
<td>12</td>
<td>9</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SE</td>
<td>10</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>12</td>
<td>3</td>
<td>3</td>
<td>11</td>
<td>4</td>
<td>40</td>
</tr>
</tbody>
</table>

Note: “Don’t know” answers are missing (N= 1808)
Source: Sweden and Denmark (2013)
Table 3: Descriptive statistics for personality items: Denmark and Sweden

<table>
<thead>
<tr>
<th>Personality trait</th>
<th></th>
<th>Mean (std. dev.) Denmark</th>
<th>Mean (std. dev.) Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>Conventional</td>
<td>3.51 (1.562)</td>
<td>3.34 (1.588)</td>
</tr>
<tr>
<td></td>
<td>Open</td>
<td>5.21 (1.245)</td>
<td>5.28 (1.298)</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Disorganised</td>
<td>2.87 (1.514)</td>
<td>2.95 (1.637)</td>
</tr>
<tr>
<td></td>
<td>Dependable</td>
<td>5.56 (1.206)</td>
<td>5.25 (1.371)</td>
</tr>
<tr>
<td>Extraversion</td>
<td>Extroverted</td>
<td>4.75 (1.424)</td>
<td>5.37 (1.207)</td>
</tr>
<tr>
<td></td>
<td>Reserved</td>
<td>3.62 (1.663)</td>
<td>4.44 (1.634)</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>Critical</td>
<td>4.63 (1.559)</td>
<td>2.99 (1.632)</td>
</tr>
<tr>
<td></td>
<td>Sympathetic</td>
<td>5.33 (1.191)</td>
<td>5.64 (1.208)</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>Anxious</td>
<td>2.81 (1.511)</td>
<td>3.34 (1.589)</td>
</tr>
<tr>
<td></td>
<td>Calm</td>
<td>5.16 (1.296)</td>
<td>5.28 (1.298)</td>
</tr>
</tbody>
</table>

Notes: “Don’t know” answers are missing (N= 1808). Standard deviation in parentheses.

Source: Sweden and Denmark (2013)
Table 4: Personality and attitudes towards EU integration*

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) EU support</th>
<th>(2) EU support</th>
<th>(3) EU support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>0.0281</td>
<td>0.0231</td>
<td>0.0913</td>
</tr>
<tr>
<td></td>
<td>(0.0246)</td>
<td>(0.0153)</td>
<td>(0.0918)</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.0189</td>
<td>0.0431</td>
<td>-0.0614</td>
</tr>
<tr>
<td></td>
<td>(0.0409)</td>
<td>(0.0314)</td>
<td>(0.0530)</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.0186</td>
<td>-0.0150</td>
<td>0.0548</td>
</tr>
<tr>
<td></td>
<td>(0.0237)</td>
<td>(0.0375)</td>
<td>(0.0618)</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-0.0947</td>
<td>-0.108</td>
<td>-0.118*</td>
</tr>
<tr>
<td></td>
<td>(0.0545)</td>
<td>(0.0724)</td>
<td>(0.0722)</td>
</tr>
<tr>
<td>Openness</td>
<td>0.0206</td>
<td>0.0302</td>
<td>0.113</td>
</tr>
<tr>
<td></td>
<td>(0.0744)</td>
<td>(0.0648)</td>
<td>(0.0800)</td>
</tr>
<tr>
<td>Country (0=Denmark)</td>
<td>0.419</td>
<td>0.290</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.249)</td>
<td>(0.147)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.00873</td>
<td>0.000438</td>
<td></td>
</tr>
<tr>
<td>Gender (0=female)</td>
<td>-0.00647</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.187)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left Right Self-placement</td>
<td>-0.0545</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0400)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voted in EP election (0= voted)</td>
<td>0.0616</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.142)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voted in national election (0=voted)</td>
<td>-0.273</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.203)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece *</td>
<td>-0.550</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.294)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Welfare</td>
<td>-0.0579</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.845)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative culture</td>
<td>0.931**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.297)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peace</td>
<td>0.0761</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.316)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive culture</td>
<td>0.0603</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.524)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economy</td>
<td>0.154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.843***</td>
<td>(0.118)</td>
<td>4.118***</td>
</tr>
<tr>
<td></td>
<td>(0.0752)</td>
<td>(0.0895)</td>
<td>(0.657)</td>
</tr>
<tr>
<td>Observations</td>
<td>1.402</td>
<td>1.402</td>
<td>1.136</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.004</td>
<td>0.006</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Notes: *For the full model, including each of the interaction terms, pls. consult the online appendix.

*** denotes significance p<0.01; ** denotes significance at p<0.05, and * denotes significance at p<0.1. Robust standard errors in parentheses clustered on regions in both countries. “Don’t know” answers are missing (N= 1808), *= For the framing treatments (0= non-treated baseline group).

Source: Sweden and Denmark (2013)
<table>
<thead>
<tr>
<th>Concept</th>
<th>Hypotheses</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negativity bias</td>
<td>( H_1 ): Negative frames affect EU opinions more strongly than positive frames.</td>
<td>Not verified</td>
</tr>
<tr>
<td>Extraversion</td>
<td>( H_{2a} ): Extraversion positively correlates with positive EU attitudes.</td>
<td>Yes, verified. But not a significant relationship</td>
</tr>
<tr>
<td></td>
<td>( H_{2b} ): Extraverted individuals are more easily influenced by framing effects, particularly positive frames.</td>
<td>Partly verified. Extraverted individuals more prone to change attitudes when receiving negative frames</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>( H_{3a} ): Neuroticism inversely correlates with positive EU attitudes.</td>
<td>Yes, significant relationship ( (p&lt;0.1) )</td>
</tr>
<tr>
<td></td>
<td>( H_{3b} ): Neurotic individuals are less easily influenced on their EU attitudes. When influenced, they are more susceptible to negative frames.</td>
<td>Yes, verified. Neuroticism is not influenced by framing effects</td>
</tr>
<tr>
<td>Openness</td>
<td>( H_{4a} ): Openness positively correlates with positive EU attitudes.</td>
<td>Yes, verified. But not a significant relationship</td>
</tr>
<tr>
<td></td>
<td>( H_{4b} ): Open individuals are more easily influenced by EU media frames, particularly positive frames.</td>
<td>Yes, verified. Both positive and negative frames impact open individuals more</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>( H_{5a} ): Conscientiousness positively correlates with positive EU attitudes.</td>
<td>Partly verified. Conscientiousness both correlates positively and negatively with EU attitudes</td>
</tr>
<tr>
<td></td>
<td>( H_{5b} ): Conscientious individuals are less influenced by EU frames. When influenced, they are susceptible to positive frames.</td>
<td>Not verified. Less conscientious individuals are more impacted by positive frames</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>( H_{6a} ): Agreeableness positively correlates with EU attitudes.</td>
<td>Partly verified. Agreeableness both correlates positively and negatively with EU attitudes</td>
</tr>
<tr>
<td></td>
<td>( H_{6b} ): Agreeable individuals are more influenced by positive EU frames.</td>
<td>Partly verified. Positive frames affect agreeable individuals more, but negative frames influence low agreeable individuals more</td>
</tr>
<tr>
<td>Country differences</td>
<td>( H_{7a} ): There are no significant differences between Denmark and Sweden, encompassing the direct or indirect effect of personality on EU attitudes.</td>
<td>Yes, verified. No significant relationship</td>
</tr>
</tbody>
</table>
Figure 1: Interaction effects of country on the effect of conscientiousness on EU attitudes
Figure 2: Interaction effects of country on the effect of openness on EU attitudes

Adjusted Predictions with 95% CIs
Figure 3: Interaction effects of Greece framing on the effect of extraversion on EU attitudes

Adjusted Predictions with 95% CIs
Figure 4: Interaction effects of Welfare framing on the effect of extraversion on EU attitudes
Figure 5: Interaction effects of Economy framing on the effect of extraversion on EU attitudes
Figure 6: Interaction effects of Greece framing on the effect of agreeableness on EU attitudes

![Adjusted Predictions with 95% CIs](image-url)
Figure 7: Interaction effects of Welfare framing on the effect of agreeableness on EU attitudes

Adjusted Predictions with 95% CIs

Agreeableness

Predicted EU support

Welfare Non-Treated

Adjusted Predictions with 95% CIs
Figure 8: Interaction effects of Peace framing on the effect of agreeableness on EU attitudes

Adjusted Predictions with 95% CIs
Figure 9: Interaction effects of Economy framing on the effect of agreeableness on EU attitudes
Figure 10: Interaction effects of Peace framing on the effect of conscientiousness on EU attitudes
Figure 11: Interaction effects of Economy framing on the effect of conscientiousness on EU attitudes
Figure 12: Interaction effects of Greece framing on the effect of openness on EU attitudes
Figure 13: Interaction effects of Welfare framing on the effect of openness on EU attitudes
Figure 14: Interaction effects of Positive political culture framing on the effect of openness on EU attitudes
Figure 15: Interaction effects of Economy framing on the effect of openness on EU attitudes