# Mind the Gap: Investigating a Gender Divide between Liberal and Conservative Parties and Mediating Effects in Germany

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# Abstract

## Purpose

Recent research highlights a gender divide in voting preferences, with men leaning towards conservative parties and women towards liberal ones. This study examines the role of gender in influencing voting preferences and explores factors that may mediate this effect. Based on prior research, these factors include masculine and feminine personality traits, emotional tendencies (anger, depression, anxiety), perceived changes in privilege, the appeal of populist communication style, and preference for intuitive decision-making over expert advice.

# Method

In a quantitative, cross-sectional online survey (N=152, M = 76, F = 76), participants were asked to indicate their voting choices, personal characteristics in terms of masculine and feminine traits, emotional tendencies for anger, anxiety and depression, along with their level of agreement to statements about their trust in science and intuition and how populist rhetoric appeals to them.

# Results

Gender was not found to significantly impact voting preference in this sample, therefore no mediation effect was found. Feminine traits, the perceived loss of privileges and the appeal of populist communication were significantly impacted by gender. Depressive and anger tendencies significantly impacted liberal voting behaviour, while the loss of privilege, appeal of populist rhetoric and trust in intuitive decision making impacted conservative preferences.

# Conclusion

This study connected different concepts to find in what way they account for the gender differences in voting preference and contributes valuable factors for further research. The perceived loss of privilege and appeal of populist rhetoric stand out as significant constructs that are affected by gender and significantly impact voting behaviour towards conservative parties. This study has found potentially relevant underlying factors, although these results would benefit from a sample that is more representative than the one in this research and need further investigation.

Keywords: gender voting gap, liberal, conservative, mediating effects

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## 1. Introduction

In recent years, the world has grown increasingly polarized in a multitude of ways. This has been particularly evident in the political landscape, where it can be observed that right-wing populist parties are rising in popularity (Spierings & Zaslove, 2017). In the recent election for the European parliament this became particularly evident, as conservative and right-wing parties dominated as winners in most countries.

Several studies have discovered that right-wing populist parties attract far more male voters than female, which was also shown in the most recent European election (Coffé, 2019; Spierings & Zaslove, 2017). Not only that: On a broad and global scale, research shows that men are overall more likely to vote for a conservative party, while women are more likely to vote for a liberal one (Giger, 2009; Hudde, 2023).

Hudde (2023) categorizes the German parties into left and right based on the Chapel Hill Expert Survey, which utilizes two dimensions: Green/Alternative/Libertarian and Traditional/Authoritarian/Nationalist. The general distinction places the Freie Demokratische Partei (FDP), Christlich Demokratische Union/Christlich-Soziale Union (CDU/CSU) and the Alternative für Deutschland (AfD) on the right side of the German political spectrum. On the left side, the Sozialdemokratische Partei Deutschlands (SPD), the Green Party (Die Grünen) and the Left Party (Die Linke) can be found. The terms left/right and liberal/conservative will be used interchangeably in this paper.

Burn-Murdoch (2024) describes how the gender voting gap is particularly pronounced for the young voters belonging to Generation Z. He further explains that in the USA and Germany, there is a 30% gap between women who vote liberal and men who vote conservative, as well as a 25% gap in the UK. Within only six years, this gap has rapidly increased, farther than it has before.

A potential consequence of this is an increasing impact of politics within personal relationships. For example, making it more likely to cause disagreements between family members of different genders, as well as increasing the likelihood of political clashes between partners (Hudde, 2023). In countries where this is more extreme, such as South Korea, it is thought to be a leading cause in decreased marriage and birth rates. While this could be limited to the culture of the region, it also serves as a cautionary example for other countries displaying similar tendencies (Burn-Murdoch, 2024).

Even though this trend of a gap in voting preferences between men and women has been researched extensively, there are few explanations about the underlying factors that may cause this gender divide.

This quantitative study aims to examine the gender gap in voting preference further in a local sample; as well as the five key underlying factors that have been found to be influenced by gender and, simultaneously, impact voting preferences. These include gendered personality traits, emotional tendencies, the perceived loss or gain of privilege, the appeal of a populist communication style, and a preference of gut feeling over experts' advice.

For gendered personality traits, studies indicate that there is a strong link between gender and masculine and feminine personality traits (Ellemers, 2018); as well as between those personality traits and political ideology (McDermott, 2016). This suggests that gendered personality traits can potentially mediate the effect between gender and voting preference. Therefore, it is valuable to not only identify typical masculine and feminine personality traits, but to then explore their effect on voting behaviour.

Concerning the emotional tendencies of men and women, multiple research articles have found consistent discrepancies between the emotional tendencies that men and women possess; as men exhibit more outward expressions of anger while women experience more inward emotions, like fear and sadness (Fischer, 2004). Upon further research, studies also show the impact of emotions on voting behaviour (Agius et al., 2020; Kettle & Salerno, 2017), meaning that emotional tendencies may also mediate the effect between gender and voting preference. Therefore it is important to define these emotional tendencies and their relationship to voting behaviour.

When looking at the impact of privilege on political preference, there is research indicating a link between the perceived loss of male privilege and voting behaviour, which should be examined for a potential relationship (Agius et al., 2020; Scheepers et al., 2009). There should also be an examination as to whether there is any indication that a gain in privilege also has an impact on ideological alignment and party preference, as well as a discussion as to the consequences of any relationship found.

Other studies point to how an individual responds to a populist communication style, finding a link between the attractiveness of populist messaging and both gender; and ideological preference. Therefore the appeal of a populist communication style potentially has a mediating effect and is worthy of focus (Bobba et al., 2018; Coffé, 2019; Hudde, 2023).

Finally, studies further report how trust in science, or lack thereof, is related to ideological preferences, and show discrepancies between how men and women respond to scientific debate (Brough et al., 2016; Richardson et al., 2023).

While this is not an exhaustive list of variables that may mediate the effect of gender on voting behaviour, all of the chosen constructs are deemed to potentially have a mediating effect due to their links to both gender and voting preferences. Therefore, they are valuable to examine.

The constructs used in this study, namely feminine and masculine personality traits, emotional tendencies of anger, depression and anxiety, perceived changes in privilege, appeal of populist rhetoric and the preference of trusting intuition over scientific experts, will be explained in detail in the theoretical framework. The hypotheses derived from previous research will also be included in the framework. Based on the hypotheses, the data gathered for this study will be analysed to find out if the gender gap can be confirmed and if these factors mediate the effect between gender and voting preference. Finally, the results will be discussed and limitations along with further implications for research will be considered.

RQ: What is the nature of the gender divide in voting behaviour?

SQ1: Is there a gender divide in voting preferences for liberal and conservative parties?

SQ2: Which potentially relevant traits can be used to characterize differences between male and female voters?

SQ3: To what extent do these constructs have an impact on voting preference? SQ4: Do the potentially relevant traits mediate the relationship between gender and voting preference?

## **2. Theoretical Framework**

In this section, the variables used in this study will be explained based on their relevance to this research. First, the main effect of gender on voting will be examined, followed by an explanation of why the constructs were chosen and the introductions of each of the constructs.

## 2.1 Gender and Voting

Several studies show that there are differences in political alignment and voting behaviour between men and women on a global scale (Abendschon & Steinmetz, 2014; Dassonneville, 2021; Giger, 2009; Hudde, 2023; Koeppl-Turyna, 2021). While women are leaning more towards liberal parties, men are voting with preference for more conservative ones and this phenomenon is happening in many countries all over the world, including Germany, the Netherlands, the UK, the USA, and South Korea.

In countries such as the Netherlands, the US, and Canada, the gender gap in party preferences was already noticeable by the 1980s (Abendschon & Steinmetz, 2014). Up until the 1970s, it was more typical for women to vote for conservative parties due to religious and traditional backgrounds, while men voted for liberal parties for socioeconomic reasons (Abendschon & Steinmetz, 2014; Hudde, 2023). The ideological gap between men and women started small and transformed slowly, a subtle shift beginning in the 1980s. However, throughout the following decades it grew until what emerged was what has presented itself in what we see today: liberal leaning women and conservative leaning men (Dassonneville, 2021).

In Germany on the other hand, this trend is relatively new, as the first election that showed women voting for more liberal parties while men voted for more conservative parties was in 2017 (Hudde, 2023).

Particularly the last German parliamentary elections along with the current European Parliament election shows a trend in this direction that is most prominently pronounced in the younger generation, aged between 18 and 24 (Datenhandbuch des Deutschen Bundestags, 2022; Tagesschau, 2024). According to Hudde (2023), the 2021 election results showed the largest gap since the second World War for young voters. The parties that were particularly divided in voters were the FDP, which garnered above 30% of votes from young men, and the three main left-leaning parties: the Green Party, the Left and the SPD - which were all especially favoured by women. So far, the main explanations for this gap are about religious, educational and employment differences. The impact of religion, which previously motivated women to vote conservatively, has weakened, making it less likely to influence voting choices. The researcher also explains how employment in lower-wage, educational and public sector jobs is typically related to a more left-leaning preference - which women work in over-proportionally. However, these reasons do not fully explain the gender gap, particularly in the younger generation, that continues to increase in this way (Dassonneville, 2021).

Another explanation of the higher number of men voting for conservative or even right-wing parties is the threat of losing their status, which might increase their susceptibility to the nostalgic claims of those parties (Hudde, 2023). Women, on the other hand, have generally more egalitarian attitudes which align better with left parties.

Overall, gender has become an increasingly significant factor in party preference, and yet in many ways is still unexplored. Therefore, the effect of women voting for more liberal parties and men voting for more conservative parties will be examined.

H1a: Female voters have a stronger preference for liberal parties than male voters.H1b: Male voters have a stronger preference for conservative parties than female voters.

## 2.2 Typical masculine and feminine personality traits

## Gender and personality traits

The conceptual duality of masculinity and femininity as a psychological and sociocultural construct has been discussed extensively in a broad range of academic literature, and across multiple fields, extending beyond the boundaries of simple and often reductive biological differences. Examining these differences can provide a more nuanced understanding of gendered personality traits and values.

While masculine traits are often associated with assertiveness, competitiveness, and emotional restraint, feminine personality traits are typically linked to empathy, nurturance, and cooperation (Ellemers, 2018).

Women tend to exhibit higher levels of empathy, which drives more pro-social behavior and a greater willingness to provide comfort when others are in distress. This is shown in a study by Christov-Moore et al. (2014), which further explains that this gendered difference in emotional responses is consistent from a young age all the way into adulthood.

Women generally score higher on traits like agreeableness, politeness, and compassion. These traits are linked to greater compliance and cooperation. In contrast, men often score higher on assertiveness - a trait often associated with agency and dominance (Ellemers, 2018; Kajonius & Johnson, 2018; Weisberg et al., 2011).

Further studies, such as those by Fraile & de Miguel Moyer (2022) confirm that men are more often socialized to express traits such as assertiveness, risk-taking, competitiveness, and self-promotion. This socialization process reinforces gender norms and impacts how men and women navigate their social and professional environments.

These insights provide a deeper understanding of the influence gender has on personal values and beliefs and provides a reasonable basis to analyse its effect on broader social trends - such as ideological preferences.

#### Voting behaviour and gendered personality traits

The effects of these gendered personality traits can seep into various aspects of life, including political behaviour. Masculine and feminine traits and values can influence perceptions of leadership, policy preferences, and voting patterns. For instance, traditional masculine traits may align more closely with conservative ideologies, while feminine traits may resonate more with liberal agendas.

An article by McDermott (2013) indicates that voters with a higher level of feminine traits, such as compassion, are more likely to vote for the Democratic Party in the US. Voters with a high level of masculine traits, such as independence, are more likely to vote for the Republican Party. Liberal parties often promote inclusivity and social support programs, such as food stamps and universal healthcare, which would be more attractive to voters with more empathic and caring personality traits. Conservative parties, on the other hand, tend to promote stricter immigration rules and lower the taxes used to fund social programs that would support less financially stable citizens. This emphasis on self-reliance appeals to voters with more assertive and independent personality traits.

According to Brough et al. (2016), green and sustainable behaviours are often perceived as more feminine, while simultaneously threatening the traditional values of masculinity. As a result, political parties that prioritize environmental sustainability, such as the Green Party, tend to receive more support from women voters. Bakker (2023) further highlights that individuals who score higher on agreeableness in The Big Five personality traits are more inclined to vote for a left-wing party to support those in need of welfare. As mentioned earlier, agreeableness is linked to compassion and politeness, which women typically score higher in (Ellemers, 2018; Kajonius & Johnson, 2018; Weisberg et al., 2011). Bakker (2023) also argues that scoring lower on agreeableness is associated with supporting populist right-wing ideologies, as evidence shows in multiple countries such as the USA, UK, Austria, Switzerland, and France. Moreover, the researcher explains that individuals who are more willing to take risks are also more likely to vote for a candidate who is seen as a challenger. This can be interpreted as support for more liberal and progressive parties, who challenge the status quo, but it can also be viewed as support for a right-wing party, such as the AFD, who many voters claim to support in protest of the mainstream and established parties (Bieber et al., 2018).

Another research study failed to show a significant relationship between feminine personality traits and voting behaviour but did show that there is a significant and positive relationship between stronger masculine personality traits and supporting the Dutch right-wing party PVV (Coffé, 2019).

Due to its shaping of underlying ideologies, the influence of gendered personality traits extends clearly into the realm of political behaviour and the direction of voting choices. On the basis of the previous research, the following hypotheses are formulated:

H2a: Women are more likely to exhibit feminine traits than men.H2b: Men are more likely to exhibit masculine traits than men.

H2c: Feminine traits are related to a preference for liberal parties.H2d: Masculine traits are related to a preference for conservative parties.

H2M: The effect of gender on voting preference is mediated by differences in personality traits.

#### 2.3 Emotional tendencies and voting behaviour

Emotional tendencies in this study refer to the tendencies for anger, depression and anxiety, as they were found to be impacted by gender and have an influence on voting preference.

#### Emotional tendencies and gender

Previous research has indicated some notable gender differences in emotional tendencies, as revealed through various psychological studies. One of the main tools for measuring these differences is the Big Five personality test, which includes the traits of Neuroticism, Openness, Conscientiousness, Extraversion, and Agreeableness. Studies show that women generally score higher on neuroticism and have higher levels of anxiety, depression, and self-consciousness compared to men (Goodwin & Gotlib, 2004; Kajonius & Johnson, 2018; Vianello et al., 2013; Weisberg et al., 2011). In contrast, men are more likely to exhibit higher levels of anger and hostility. Furthermore, a large-scale analysis finds that the gender differences in personality traits of The Big Five are higher in countries with higher gender equality and that women score higher on all five personality traits (Mac Giolla & Kajonius, 2019).

A meta-study about gendered emotional responses in Western countries found that men tend to express more outward and powerful emotions, such as anger, whereas women are more likely to express emotions perceived as powerless, like sadness and fear (Fischer et al., 2004). This is further supported by research from Chaplin & Aldao (2013), along with other studies that found men are more likely to express anger and aggression compared to women (Fahlgren et al., 2022; Kim et al., 2022; Nivette et al., 2019).

Another comprehensive meta-study by Herlitz et al. (2024) indicates a greater predisposition for outward aggression in men and reaffirms that women score higher on measures of neuroticism and depression. This study also highlights that women tend to internalize emotions, such as fear, more often; while men are more prone to externalizing emotions like anger and antagonism. However, it is important to note that not all studies within this meta-analysis observe gender differences in negative emotions, including anger. Further research by Dell et al. (2020) suggests that women report significantly more symptoms of depression and anxiety, and exhibit a stronger reactance to sadness and fear overall. In a meta-study analyzing 29 different countries, it is consistently found that depression rates are higher in women than in men while also noting that this gender gap is larger in countries with higher gender equality (Hopcroft & Bradley, 2007). Other studies suggest that symptoms of depression in men can manifest differently, exhibiting more outward behaviours such as anger and aggression outbursts instead of depression-typical behaviours that are more likely to be shown by women. This may contribute to the observed differences in depression diagnosis rates between genders (Martin et al., 2013).

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These gendered emotional responses have profound implications for understanding mental health and personality dynamics. They also highlight how certain emotions are more socially accepted based on gender and that more research is needed for why the differences are more profound in countries with higher gender equality.

#### Tendency for certain emotions related to voting

Research indicates that emotions play a significant role in shaping voting behaviour, with distinct emotional responses differing across genders and influencing political preferences.

According to (Agius et al., 2020), emotions such as anger, hate, and manifestations of toxic masculinity became particularly evident during discussions of the climate crisis and in response to the COVID-19 pandemic. These affective responses are often leveraged to construct narratives around anti-immigration, anti-diversity, and anti-globalization, reinforcing the perception that national protection needs to be strengthened. Populist right-wing parties capitalize on these gendered emotional traits to shape their political messaging.

Conversely, higher levels of neuroticism, characterized by anxiety and depression, are consistently positively correlated with support for left-wing parties (Bakker, 2023). This can be attributed to left-wing parties often implementing policies designed to address and alleviate anxiety and insecurity.

Additionally, Kettle & Salerno (2017) found that anger tends to drive individuals toward economic conservatism, which involves a competitive stance on resource allocation and a reluctance to share resources broadly, aligning with conservative ideologies.

Moreover, Erisen & Vasilopoulou (2022) have shown that anger, rather than fear, is the primary emotional force connecting anti-immigration attitudes with support for right-wing parties. These findings illustrate the complex interplay between emotional responses and political preferences, highlighting how specific emotions can influence voting behaviour across the political spectrum.

The relationship between emotions and voting behaviour highlights the impact of gendered emotional tendencies on political preferences. There is a higher prevalence of anxiety and depression among those scoring high on neuroticism aligning with support for left-wing parties - which often promote policies that prioritize help for these issues.

Meanwhile, the role of anger in driving economic conservatism and its connection to anti-immigration sentiments, as well as claiming a need for national protection, further exemplifies how specific emotions can influence different political ideologies. This results in the following hypotheses:

H3a: Women are more likely to show more anxious tendencies.H3b: Women are more likely to show more depressive tendencies.H3c: Men are more likely to show more anger tendencies.

H3d: Anxious tendencies are related to a preference for liberal parties.H3e: Depressive tendencies are related to a preference for liberal parties.H3f: Anger tendencies are related to a preference for conservative parties.

H3M: The effect of gender on voting preference is mediated by differences in emotional tendencies.

#### 2.4 Perceived loss or gain of privileges

#### **Privilege and Gender**

In recent years, societal shifts towards greater gender equality have led to perceptions of a loss of privilege among men, as well as a gain of privilege for women. These perceptions can cause emotional and behavioural responses, as individuals and groups struggle with changes that challenge long-standing social hierarchies and power dynamics.

Ellemers (2018) explains that awareness of inequality in society can elicit strong emotional responses from those who benefit from the status quo, causing resistance towards measures aimed at establishing equality. This resistance can externalize into actions against women when men feel like their group privilege is threatened, and can lead to a place of denial; thwarting efforts to address these inequalities due to feeling guilty over their advantages. Further studies, such as those by Scheepers et al. (2009), show that the threat of losing a privileged position can even trigger cardiovascular reactions. This became evident in discussions about improving gender equality in society, where the topics of gender inequality and measures to improve it led to an increased heart rate and blood pressure in the men studied..

The COVID-19 pandemic intensified these dynamics, as research by Czymara et al. (2021) reveals. The disparities between men and women in paid work and caregiving roles increased, forcing many women to take a step back from their careers, reducing paid hours, to manage household responsibilities and care work.

The feeling of losing male privilege can arise from various sources, including economic factors such as downsizing and outsourcing within the workplace, which contribute to feelings of alienation and ontological insecurity (Agius et al., 2020).

While there is at least some research on the emotional responses of men when being threatened with a loss of privilege, there is substantially less research on the emotional responses of women when presented with an opportunity to gain privileges. According to Mavin & Grandy (2016), the relationship between women and gaining privilege seems rather fragile, negotiated, and dynamic. However, when privilege is stabilized, women report feeling more empowered, in control, and credible.

Regarding what women may be able to gain in privileges, there is research indicating how European countries are doing in terms of gender equality (Lomazzi et al., 2018). The Gender Equality Index (GEI), developed by the European Institute for Gender Equality, consists of six factors that contribute to an overall score. 'Work' consists of economic power and quality of work; 'Knowledge' accounts for educational participation and completion of education; 'Money' means the financial and economic resources available; 'Time' refers to gender disparities in time spent on care-work and other responsibilities; 'Health' includes aspects of the healthcare and medical system, life expectancy and healthy living; and finally 'Power' refers to female representation and participation in the political, social and economic landscape. If a country was completely equal, it would reach a score of 100. A score of 0 would mean complete inequality. Germany has an overall GEI score of 65.5, which is slightly below the European average of 66.2, putting it in 12th place. Germany's score in the aspect of Knowledge is particularly low, only 52.9 compared to the European average of 63.4. Another notable aspect is Power, where Germany scores 53, slightly above the European average of 48.5. While Germany scores slightly above the EU average, these scores are still relatively low. Comparatively, Sweden has an overall score of 82.6 and is in first place. Greece has the lowest GEI score with 50 - Germany is closer to the lowest score than the highest. This index highlights that while there certainly have been improvements in gender equality, Germany is still far from offering the same opportunities and quality of life for women as it does for men.

Understanding the dynamics of the perceived loss and gain in privileges for men and women is crucial, as it is a fundamental aspect of society's development. For men, feelings of alienation and the sudden insecurity of their established place in the social hierarchy may lead to a resistance towards efforts to promote gender equality. While for women, the path to gender equality may still feel like a long way to go. These differences could lead to conflicted emotions and discrepancies between the individual versus the group experience.

#### Privilege and Voting behaviour

Perceptions of losing or gaining privilege can significantly influence voting preferences, particularly in the context of gendered privileges. Right-wing parties, especially far-right ones, effectively utilize feelings of alienation and disempowerment. Agius et al. (2020) indicate that in Sweden, recent elections show that many voters support the far-right Democratic Party as a reaction against immigration and feminism, which stands in stark contrast to Sweden's strong commitment to gender equality and feminist policies, as shown in the GEI mentioned earlier.

Dahl et al. (2015) link perceived threats to masculinity to anger, and the endorsement of ideologies that reinforce hierarchies aiming to subordinate women. This is rooted in the desire to reassert dominance and maintain or re-establish existing power structures. Moreover, the researcher explains how for women, those ideologies can disempower them even if they do not accept them - as they instill beliefs of not being able to succeed, and reduce participation in areas that are typically dominated by men.

Most right-wing parties directly oppose policies aimed at reducing gender inequality (Löffler et al., 2020). For instance, the AfD explicitly rejects female quotas, while the CSU in Bavaria has banned gender-inclusive language, a contentious topic in Germany. However, some conservative parties, such as the FDP and the CDU, either support or do not strictly oppose efforts to promote gender equality, such as the implementation of female quotas.

Despite these nuances, conservative parties in Germany fall behind in achieving gender equity in their members compared to liberal ones. In 2019, the CDU had only 21.5% women in its parliamentary representation, with the FDP, CSU, and AfD having even lower percentages (Ahrens & Lang, 2022). In contrast, liberal parties like the Social Democratic Party (SPD) and the Green Party have made significant strides toward balanced gender

representation. Consequently, individuals who value gender equality are more likely to vote for liberal parties.

Additionally, Peters et al. (2020) argue that organizations that are dominated by traditional gender roles tend to disapprove of measures aimed at improving gender equity. This resistance is often linked to the desire to maintain male privilege, which in turn can be linked to a preference for conservative right-wing ideologies that uphold traditional gender norms.

The interaction between perceived loss and gain of privilege and gender may significantly influence voting behaviour. The reactance to gender equality among those who feel that their privilege is threatened increases support for conservative and far-right parties, while those advocating for gender parity tend to align with liberal ideologies. Therefore, it is necessary to examine attitudes towards privilege and voting preference.

H4a: Women are more likely to perceive a gain of privilege.H4b: Men are more likely to perceive a loss of privilege.

*H4c: A perceived gain in privilege for women is related to a preference for liberal parties. H4d: A perceived loss in privilege for men is related to a preference for conservative parties.* 

H4M: The effect of gender on voting preference is mediated by differences in perceived loss or gain in privileges.

## 2.5 Populist communication style

Populism, as defined by Mudde (2004), is not a standalone ideology but rather a 'thin-centered ideology' that must be combined with another ideology to be fully realized. The defining feature is a people-centered core and its emphasis on the notion that democracy should primarily serve the common people. Additionally, populism includes a strong anti-elitist stance, portraying the elite as corrupt and antagonistic to the interests of common citizens (Spierings & Zaslove, 2017). This ideology is reflected in the communication style of populist parties, which often use direct and straightforward language that resonates with 'the people' (Bracciale & Martella, 2017; de Vreese et al., 2018; Spierings & Zaslove, 2017). Populist rhetoric is characterized by its willingness to address controversial and politically incorrect topics, arguing for the right to speak one's mind (Hameleers et al., 2021; Nai, 2021). Furthermore, these parties frequently appeal to emotions, particularly negative ones, to polarize and increase engagement (Hameleers et al., 2021; Nai, 2021).

#### **Populism and Gender**

While some research indicates a notable gender disparity in the support for populist parties, there is a lack of research on the topic. Dietze (2022) remarks that research about gender and populism is only slowly emerging. Other research only considers how gender is being utilized in populism, particularly right-wing populism, but not how it affects individuals of each gender respectively.

Bobba et al. (2018) found that men are more receptive to populist messages than women. In their study analyzing reactions to over 2,000 Facebook posts from populist parties in France and Spain, they discovered that these messages, regardless of being from radical or moderate, right or left-wing populist parties, reached a larger audience of active male Facebook users. Notably, anti-elite messages significantly increased the number of 'likes' from men.

Additional studies highlight a significant gender gap in voting for populist right-wing parties, with a less pronounced and less researched gap for left-wing populist parties. This disparity in support for right-wing populism is not solely due to socioeconomic factors but is also influenced by populist attitudes (Spierings & Zaslove, 2017). Individuals more inclined to compromise and listen to diverse opinions are less likely to exhibit populist attitudes, which makes women, who are commonly socialized to seek compromise and consensus, typically less drawn to populist rhetoric.

## **Populism and Voting**

Research consistently shows that populist parties, particularly radical right-wing populist parties, receive more votes from men than from women (Agius et al., 2020; Bobba et al., 2018; Coffé, 2019; Dietze, 2022; Giger, 2009a; Hudde, 2023; Spierings & Zaslove, 2017). While populism can be embraced by both left and right-wing parties, right-wing populism often makes appeals to emotions such as anger and resentment, emphasizing the need for protection and expressing a loss of faith in mainstream parties (Agius et al., 2020; Bracciale & Martella, 2017; Nai, 2021).

The resonance hypothesis suggests that populist parties gain traction by speaking the language of their voters (Bakker, 2023). Individuals who score lower on Agreeableness are more likely to be receptive to populist claims, regardless of whether they are left or right-wing, particularly when these claims are directed against the establishment. As previously established, a low score on Agreeableness is often also related to a preference for right-wing parties altogether.

In conclusion, the gender gap in support for populist parties is influenced by several factors. Men are more likely to engage with and support populist messages, particularly those from the radical right, which often exploit feelings of anger and resentment. Additionally, the strategy of populist parties to use a direct and plain manner of speaking to resonate with voters further increases their appeal, especially among those who are less agreeable and more critical of the establishment.

H5a: Women are less likely to find populist rhetoric appealing.H5b: Men are more likely to find populist rhetoric appealing.

*H5c: The lack of appeal of populist rhetoric is related to a preference for liberal parties. H5d: The appeal of populist rhetoric is related to a preference for conservative parties.* 

H5M: The effect of gender on voting behaviour is mediated by differences in the appeal for a populist communication style.

#### 2.6 Trusting in science vs feeling above expertise

## Trust in science and gender

Various research has shown gender differences regarding trust in science and scientists. While older research mainly showed a decrease in trust for women, this difference was identified to be mediated by scientific knowledge and religiosity and can be explained by the historic exclusion of women from the scientific community, and the consequences that has had on society (G. W. Gauchat, 2008; von Roten, 2004).

Moreover, different topics within the scientific field garner different levels of trust from each gender. While one shows that women have less trust in vaccination science and are more hesitant about vaccines (Richardson et al., 2023), other studies have indicated that, especially during the recent pandemic, women more readily accepted and adopted protective measures (Dohle et al., 2020). Alongside this, research has consistently shown differences in trust as well as levels of denial towards climate change science (Brough et al., 2016; Haltinner & Sarathchandra, 2022; Richardson et al., 2023; Xiao & McCright, 2015).

Agius et al. (2020) describe how female leaders, for instance in Finland, Germany, Denmark, and Iceland, led through the recent Covid pandemic with compassion, resilience, and trust in the common sense of the community, and were praised for their excellent handling of the crisis. In contrast to the female leaders, other male heads of state, like Trump and Bolsonaro, stood out by dismissing the advice of health experts. Partially because they feared to appear weak and vulnerable but also to protect the economy from declining, which would affect political campaigns and the chance to get re-elected. The researcher even calls these types of responses particularly masculine by emphasizing traits of strength over other traits.

According to Vranic et al. (2022) and Light et al. (2022), people who tend to be overly confident in their ability to think critically are less likely to correctly differentiate between science and pseudoscience. They tend to believe that their own research is just as legitimate and of the same quality as research by an expert, while trusting their own research to be less biased. This notion often goes together with a distrust of science and public health institutions (Vranic et al., 2022). Furthermore, most research consistently shows throughout a broad range of aspects and areas, that men are more often overconfident in their abilities than women (Ariel et al., 2018; Barber & Odean, 2001; Beyer & Bowden, 1997; Boekaerts & Rozendaal, 2010; Stankov et al., 2009; Vajapey et al., 2020).

## Trust in science and voting behaviour

Multiple research articles suggest that political ideology and trust in science correlate. In particular, a lower level of trust in science is usually related to a conservative ideology (Bromme et al., 2022; Gauchat, 2012; Haltinner & Sarathchandra, 2022; Jäckle et al., 2023; Richardson et al., 2023).

Gauchat (2012) describes how over time, conservatives in the US have become less trusting in science, while for liberals the trust in science has not changed. This is especially

true for climate scepticism, which is significantly more prevalent in conservative ideologies in the US but in Western European countries as well (Haltinner & Sarathchandra, 2022; Krange et al., 2019; McCright et al., 2016; Richardson et al., 2023; Rutjens et al., 2021). This is most likely due to prioritizing personal freedom and the free-market economy. As previously noted, populism is more prevalent within the ideological right, and marking scientists as the untrustworthy 'elites' became a popular political platform for right-wing populist leaders, as seen with Trump (Agius et al., 2020). The same type of reasoning might also account for greater scepticism among the ideological right during the Covid-19 pandemic, as conservatives are less likely to trust health experts on the matter (Jäckle et al., 2023; Rutjens et al., 2021). This becomes clearer the further right one goes. The AfD, for instance, denounced advice on safety measures given by renowned virologists and other health experts as incompetent, biased and elitist (Bromme et al., 2022). Meanwhile, according to Jäckle et al. (2023), the acceptance of Covid-related safety measures was higher in people with a liberal ideology.

Whether it is a distrust in science that affects political party preference, or whether the ideology itself leads to a distrust, still it is evidenced that voters who are sceptical about science and rely on their own gut feeling prefer voting for a conservative party. Vice versa, voters who trust science and scientific insights are more inclined to vote for a liberal party.

H6a: Women are more likely to listen to the advice of experts and less likely to prefer their own gut feeling.

H6b: Men are more likely to dismiss the advice of experts and more likely to prefer their own gut feeling.

*H6c: Trust in science is related to a preference for liberal parties. H6d: A mistrust in science is related to a preference for conservative parties.* 

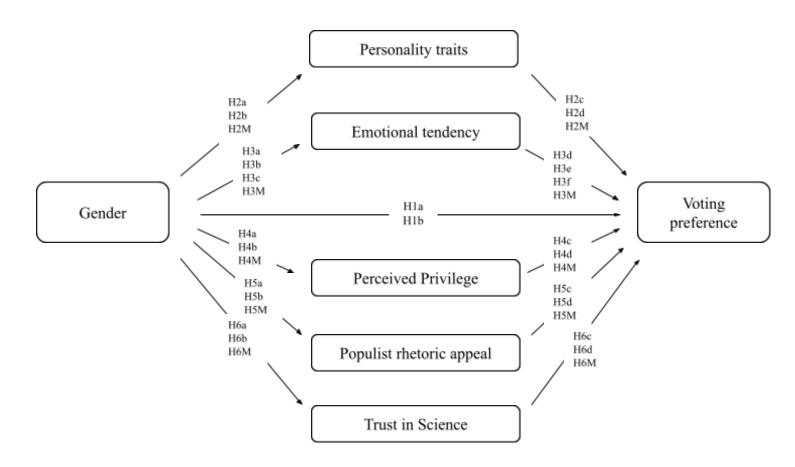
H6M: The effect of gender on voting behaviour is mediated by differences in trust in science.

## **2.7 Research Model**

The general hypothesis of gender affecting voting preference, as well as the effects mediating constructs are hypothesized to be influenced by gender and in turn impacting the voting preference can be seen in Figure 1.

## Figure 1

Mediating effects between gender and voting preference.



## 3. Method

The following section describes which research design was used and why it was chosen, the procedure of the study, the measures the study utilized, and a description of the participants that took part in the study.

#### 3.1 Research Design

This study was based on a quantitative research design, utilizing an online survey to reach a larger and more accessible sample. This allows us to study the effect of the variables throughout a broader population .

To investigate the general effect of gender on voting preference and the mediating effects of various factors, a cross-sectional study was conducted. The independent variable in this study was gender, while the dependent variable was voting preference. The mediating variables included masculine and feminine personality traits, emotional tendencies, perceived gain or loss of privilege, the appeal of populist rhetoric, and the preference for trusting science over gut feelings or vice versa. The study received approval of the BMS Ethics committee of the University of Twente on the 14th of May, 2024.

#### 3.2 Measures

The survey includes demographic questions about gender, age, and whether the participant is eligible to vote in Germany. After that, two questions about voting preferences are asked - one asks which party the participant voted for in the last election, the other one asks who the participant would vote for now. The options for answering include all the main party options, abstaining from voting, and the option to indicate what other party was voted for in case it was not included in the answer block. The next block of statements regard masculine and feminine traits, followed by emotional traits. After that the participant is asked about the situation of privilege in Germany, how much they trust in scientific findings or prefer their own common sense, and finally, how much they agree with populist rhetoric.

All scales, except for the emotional tendency scale, use a 5-point Likert scale to indicate the level of agreement to the statement or question, ranging from "Strongly Disagree" to "Disagree", "Neither Agree nor Disagree", "Agree" and "Strongly Agree". This ensures an accessible way to answer the survey without taking too much time and effort for the participant. The entire survey can be found in Appendix A. In the following subsections, each of the scales will be explained separately.

## Masculine and feminine traits

To measure masculine and feminine personality traits, the short form of the Bem-Sex-Role-Inventory is used, which has been revised and updated and widely used for this purpose and consists of 20 traits (Colley et al., 2009). Additionally, six items to measure the level of empathy were added - based on the Toronto Empathy Questionnaire (Spreng et al., 2009). Originally, this scale consisted of 16 items, but only those that were deemed necessary were added to the masculine and feminine traits scale for this purpose. These items were included because empathy was displayed as an important factor in the difference between masculine and feminine personality traits (Christov-Moore et al., 2014; Ellemers, 2018). After adding these items, the scale used in this study contains 26 items and includes statements like "I am assertive", "I am compassionate", "I am competitive" and "I am sensitive to the needs of others" to which the participant can state their level of agreement.

#### **Emotional tendencies**

For the emotional tendencies, three scales were combined to create the scale used in this study. First, the Mini-DASS-Scale from Monteiro et al. (2023) contains four items each to measure levels of depression, anxiety, and stress. Since measuring stress is not particularly relevant for this research, only the eight items for depression and anxiety are included in the scale. Because the original scale measures depressive and anxious symptoms over the last two weeks, the statements were changed into a general sentiment to measure the overall tendency of feeling depressed and anxious. The items include statements, such as "I am unable to become enthusiastic about anything", "I feel like I have nothing to look forward to", "I feel scared without any good reason" and "I am worried about situations in which I might panic and make a fool out of myself".

To measure the tendency for anger, the anger proneness scale by García-Cadena et al. (2018) is used, which consists of four items. Additionally, two items from the Angry Temperament/Angry Reaction scale by Lievaart et al. (2016) are included. The items to measure anger included statements like "I can get angry at any time", "I get angry easily" and "I get angry when slowed down by other people's mistakes".

The final scale used in this study to measure the tendency for depression, anxiety, and anger consists of 14 items. The scale is measured in terms of frequency on a 5-point Likert scale with answers ranging from "Never", "Rarely", "Sometimes", "Often" to "Very often".

## Perceived loss or gain of privileges

The scale to measure the perceived loss or gain of privileges was constructed by using six statements about the current situation for men and women in Germany regarding economic and social dimensions. The scale includes the statements: "Women have gained more power and influence in various spheres of German society", "Efforts to promote gender diversity in leadership positions have provided more opportunities for women in Germany", "Women in Germany are experiencing advantages in employment, education or family life more often as a result of efforts to promote gender equality", "Men are experiencing a loss of privileges and status due to efforts to promote gender equality", "Men's social and economic status has been affected by increasing gender equality", and "Men in Germany are experiencing disadvantages in employment, education or family life due to efforts to promote gender equality".

#### Populist communication style

The last scale in this survey regards how appealing the participants find a populist style of communication. The items for this scale are based on what Hameleers et al. (2021) and Spierings & Zaslove (2017) identify as important aspects of populist communication style, which includes direct and straightforward rhetoric, addressing controversial topics, appealing to emotions, and not prioritizing political correctness. This resulted in a set of seven statements that participants can agree or disagree with. The items include phrases such as "Politicians tend to be too vague in their communication", "I appreciate when politicians are not afraid to address controversial topics" and "Politicians should be able to appeal to emotions".

## Trust in science

The scale to measure the trust in science, as well as preferring the more intuitive, own gut feeling, over experts' advice is loosely based on the statements given by Bromme et al.

(2022). In the article, the researcher mentions specific statements that indicate a stronger level of trust, but also statements that display a distrust in science on the level of expertise, integrity, and benevolence. The scale used in this study includes nine statements, such as "Scientific theories are trustworthy", "Scientists make their findings too complex and complicated", "I trust my gut feeling more than listening to an expert" and "We cannot trust science to be unbiased". The answers are measured based on the level of agreement.

#### 3.2 Scale analysis

Before analysing the data, a scale analysis and confirmatory factor analysis were conducted to examine if the scales are reliable and measure the intended constructs correctly. After an initial scale analysis of each construct separately; a factor analysis of the comprehensive model was done. During this analysis, items that did not fit the model were deleted, which led to the elimination of anxiety as a construct. In this process, three items out of 14 from the feminine personality traits; nine items out of 12 from masculine personality traits; all four items from the anxiety scale; two out of six items from the scale to measure anger; three items that measure the perceived loss of privilege; four out of nine items to measure the level of trust in science; and four out of seven items to measure the appeal of a populist communication style, were deleted. All Cronbach's alpha values, factor loadings, Eigenvalues and explained variance can be found in the table below. The values for the populism and masculine traits scale are slightly below the common cut off point for Cronbach's alpha ( $\alpha = .70$ ), making the reliability for these two scales not ideal. However, due to their solid factor loadings and clear relevance for the factor and this research, the scales were kept in for analysis. All scales had acceptable Kaiser-Meyer-Olkin values >0.60 and a significant Bartlett's sphericity test (p < 0.05).

Factor Analysis with item loadings.

Scale Item	Factor Loading				ading		
	1	2	3	4	5	6	7
Factor 1: Feminine Traits (Q8)							
1. I am eager to soothe hurt feelings.	.52						
2. I am not really interested in how other people feel.	47						
3. I am sympathetic.	.81						
9. I am affectionate.	.62						
14. I get a strong urge to help when I see someone who is upset.	.66						
15. I am sensitive to the needs of others.	.69						
18. I am understanding.	.58						
20. I am gentle.	.56						
21. Somebody else's happiness makes me feel happy too.	.59						
23. I consider myself a warm person.	.84						
24. I care about others more than myself.	.52						
Factor 2: Masculine traits (Q8)							
7. I am assertive.		.82					
10. I am dominant.		.62					
11. I am independent.		.43					
16. I defend my own beliefs.		.46					
Factor 3: Anger (Q10)							
1. I get angry easily			.79				
6. I can get angry at any time.			.69				
9. It makes me angry when things don't go the way I want.			.52				
10. If someone contradicts me, I get angry.			.57				
Factor 4: Depression (Q10)							
4. I feel that I have nothing to look forward to.				.80			
7. I am unable to become enthusiastic about anything.				.72			
8. I feel I am not worth much as a person.				.73			
13. I feel that life is meaningless.				.65			
Factor 5: Loss of male privilege (Q12)							
4. Men in Germany are experiencing a loss of privilege or status due to efforts to promote gender equality.					.82		
5. Men's social and economic status in Germany has been affected by increasing gender equality.					.60		

6. Men in Germany are experiencing disadvantages in employment, education, or family life due to efforts made to promote gender equality.					.52		
Factor 6: Gut feeling (Q15)							
1. Scientific theories are trustworthy. (R)						.65	
3. I find scientific experts to be reliable and trustworthy. (R)						.69	
5. Scientists make their findings too complex and complicated.						45	
7. I believe that scientific research conducted by experts is generally more reliable than relying solely on my own intuition or common sense. (R)						.79	
9. I trust my gut feeling more than listening to an expert.						74	
Factor 7: Populist communication style (Q13)							
1. Politicians tend to be too vague in their communication							.42
4. I appreciate when politicians are not afraid to address controversial topics.							.47
5. Politicians should be able to speak their minds.							.79
Eigenvalues	4.54	1.79	2.03	2.45	1.53	2.57	1.28
Cumulative variance in %	13.4	39.3	34.1	28.1	43.8	20.9	47.6
Cronbach's alpha	.87	.67	.73	.83	.72	.80	.57

*Note.* Reverse scored items are marked with a (R).

#### **3.3 Procedure**

The questionnaire was set in German, as the aim of this study is to examine the gender gap and mediating effects on the voting preference between German liberal and conservative parties. To ensure unbiased responses, the true aim of the study was initially concealed; participants were only informed that the study concerned personal characteristics and voting preferences. At the end of the questionnaire, the actual aim was revealed, and participants were asked to reaffirm their consent for the use of their responses.

Participants were also informed that only fully completed surveys can be used for the study and were prompted to answer all questions.

The survey started with an informed consent form, followed by demographic questions about gender, age, and whether the participant is eligible to vote in Germany. Following this, the participants were asked about their voting behavior in the last election, and their current voting intentions. The survey included questions about their personality traits using the short form of the Bem Sex-Role Inventory (BSRI); emotional tendencies such as anger, anxiety, and depression using the Mini-DASS-Scale mixed with an anger scale;

perceived gain or loss of privilege; trust in science versus gut feelings; and their response to populist communication styles. All scales were measured on 5-point Likert scales, indicating either frequency or the extent of agreement with statements.

#### **3.4 Participants**

Participants for the study were recruited through personal contact by the researcher either through social media or in person, as well as through SurveyCircle - an online platform to find survey participants, and Reddit, in a subreddit for sharing surveys in German speaking countries. Participants were also asked to share the survey, and the means to do so were provided at the end, allowing for a further reach and a greater variety in age groups.

Initially, the sample consisted of 182 respondents, of which 20 participants (11%) dropped out of the survey. One person answered that they were not allowed to vote in Germany (0.5%), another person did not reaffirm consent for their data to be used after revealing the true aim of the study (0.5%), six individuals abstained from both voting choices (3.3%) and one person was not allowed to vote in the last election and now chose to abstain (0.5%). Since there was only one participant who identified as nonbinary and it did not make sense to measure the effect of a gender consisting of one person, they were excluded from analysis (0.5%). After omitting these individuals from data analysis, the final sample included 152 participants ( $M_{age}$  = 39.7,  $SD_{age}$  = 16.6). Out of these participants, 76 were men (50%), 76 were women (50%). The demographics of this sample can be found in Table 1.

Factor	Number	Percentage
Total	152	100%
Gender		
Men	76	50%
Women	76	50%
Age		
18 - 29	57	37.5%
30-39	38	25%
40-49	10	6.6%
50-59	10	6.6%
60-69	30	19.7%
70+	7	4.6%

Demographics of the study participants

#### **3.5 Analysis**

To make the analysis of the voting preference possible, the parties had to be categorized into liberal and conservative ideologies. This was partially done based on the consensus of the main party ideologies and the classification by Hudde (2023). However, some participants also stated other parties they voted for, which have not yet been defined. To categorize those parties, the party programs were inspected and a comparison was made to the agendas of political parties already ideologically categorised by Jankowski et al. (2022), which include topics such as economical, sociocultural, immigration, and climate politics. This resulted in the categorization of Volt, Die Partei (The Party), Letzte Generation (Last Generation), and Partei des Fortschritts (Progress party) as liberal, while the Ökologisch-Demokratische Partei (ecological-democratic party), Werteunion (Union for values), and Bündnis Sahra Wagenknecht as conservative. Participants who commented that they were indecisive but presented two clearly liberal or conservative options were also included in the respective category. First, the effect of gender on voting choices was analysed, as well as the differences between the effects that gender was shown to have. This was followed by carefully analysing each of the variables, the extent to which gender influences them, and how they in turn impact voting preference. They were then also analysed for their mediating effect.

## 4. Results

In the following section, the results of the analysis will be discussed. First, some general descriptive results will be stated, including the results on voting behaviour and how the two groups compare for each variable. Following this will be a discussion about the effect of gender on the constructs, and then the effect of the constructs on voting behaviour. Lastly, an overview of the confirmation or rejection of all hypotheses will be given.

Before conducting the t-tests and logistic regression analysis to examine the effect of gender on each construct and voting behaviour, as well as the effect of the constructs on voting behaviour, the assumptions underlying the analysis were checked on linearity, multicollinearity, independence of errors, and outliers in R. To check linearity, the Wald test, as well as the Box-Tidwell test, and a plot with predicted probabilities were conducted. These options were chosen since the independent variable: gender; and the dependent variable: voting liberal or conservative; were both binary, and therefore it would be unsuitable to check for linearity in other ways. Multicollinearity was tested by checking the variance inflation factors to exclude the possibility of highly correlated independent variables. The independence of errors was checked by observing the plot of residual vs observation numbers for any obvious patterns or residual clusters. Lastly, outliers were checked for with Cook's distance plot to see if there are values greater than one. The plots and values can be found in Appendix B. No assumption was violated; therefore, it proceeded with the analysis. Furthermore, each model was also inspected for good fit using the Hosmer-Lemeshow test, which indicated a good fit when the p-value is greater than .05. All the construct models passed this test. An alpha level of .05 was used for all statistical tests.

## 4.1 Gender and voting

In the table below (Table 3), the voting choices of the last election, as well as the choice now, can be seen and compared between men, women, and total votes. The distribution of the votes by party can be found in Appendix C. Voters without a clear liberal or conservative standpoint were excluded in the regression analysis but included in this table to show the distribution of all 152 participants.

Party	Wom	ien	Me	Men		otes
	Number	%	Number	%	Number	%
Liberal vs Conse	rvative parties	last election	n			
Liberal	53	70%	45	59%	98	65%
Conservative	22	29%	26	34%	48	32%
Unknown	1	1%	5	7%	6	4%
Liberal vs Conse	rvative parties	now				
Liberal	42	55%	41	54%	83	54%
Conservative	24	32%	29	38%	53	35%
Unknown	10	13%	6	8%	16	11%

Choice of who participants voted for in the last election and who they would vote for now.

The overall distribution shows how liberal party voters predominate over conservative voters, which is also seen in the distribution of both men and women. The choice for liberal parties decreased for the current party choice, but the majority of male and female participants still chose liberal parties over conservative ones. The voting behaviour was tested in two variables, preference in the last election and preference now. After checking the results between the two groups for the gender differences, and for the effect on the variables, which were not marginally different, it was decided to only include the voting preferences now as reference. A Chi-Square test of independence showed that there was no significant difference between men and women in the current liberal and conservative voting preference,  $\chi^2(1, N=136) = 0.184$ , p = .668. So while it can be confirmed that women overall prefer liberal parties over conservative ones; men in this sample do not prefer conservative parties over liberal ones - and there was no significant difference between gender and voting behaviour found.

## 4.2 Impact of gender on potentially relevant traits

To test how gender affects each of the variables, several independent sample t-tests were conducted. The results can be found in table 4.

Gender differences in each variable.

Variable	Men		Women		t(150)	р
	Mean	SD	Mean	SD		
Feminine personality traits	3.6	0.4	3.8	0.5	2.527	.013*
Masculine personality traits	3.6	0.6	3.5	0.7	-0.917	.361
Anger tendencies	2.5	0.6	2.7	0.6	1.741	.084
Depressive tendencies	1.8	0.8	1.9	0.7	0.468	.641
Perceived loss of privilege	2.6	0.7	2.2	0.7	-2.633	.009*
Preference of gut feeling over expertise	2.4	0.6	2.5	0.7	0.925	.356
Appeal of populist communication style	4.2	0.5	4.0	0.6	-2.126	.035*

Note. Significant effects are marked in bold, significant p-values are marked with \*.

Feminine personality traits were significantly higher for women, while masculine personality traits were slightly increased for men but without a significant difference. Both emotional tendencies, anger and depression, showed a mildly higher mean for women but, again, without a significant difference. Men in this sample exhibited a significantly higher perception of a loss of privilege compared to women. There was no gender difference found in the preference of listening to one's own intuition over expertise. Lastly, men had a significantly higher likelihood of finding a populist communication style more appealing than women did.

## 4.3 Effect of each potentially relevant trait on voting choice

The effect of the variables on liberal and conservative preferences was analysed in two steps. First, an independent sample t-test was conducted for each variable to investigate if, and in what way, the variable impacts voting choice, which can be found in table 5. In the second step, a regression analysis with all of the variables together was performed to understand the relative importance of the variables' gendered impact on voting preference, which will be stated in table 6.

Variable	Liberal		Conservative		t(150)	р
	Mean	SD	Mean	SD		
Feminine personality traits	3.7	0.4	3.6	0.5	1.134	.259
Masculine personality traits	3.5	0.7	3.6	0.6	-0.936	.351
Anger tendencies	2.7	0.6	2.4	0.6	2.215	.028*
Depressive tendencies	2.0	0.8	1.5	0.6	3.696	.000*
Perceived loss of privilege	2.3	0.9	2.6	0.8	-2.377	.019*
Preference of gut feeling over expertise	2.2	0.6	2.7	0.7	-4.237	.000*
Appeal of populist communication style	3.9	0.6	4.2	0.5	-2.809	.005*

Impact of each variable on voting preference.

Note. Significant effects are marked in bold, significant p-values are marked with \*.

As these results show, there are several variables that have a significant impact on voting behaviour. Neither feminine nor masculine personality traits had a significant effect on voting preference. However, both anger and depressive tendencies showed a significant effect on a preference for liberal parties. This confirms the hypothesis of depressive tendencies having an impact on liberal voting behaviour, but rejects the hypothesis of anger tendencies relating to conservative voting. Meanwhile, the perceived loss of privileges, the preference of listening to one's own gut feeling over the advice of experts, and the appeal of a populist communication style are all significantly related to voting conservatively, which confirms the corresponding hypotheses.

Variable	Estimate	SE	z-value	p-value
Feminine personality traits	-0.156	0.486	-0.325	.745
Masculine personality traits	0.004	0.354	0.011	.991
Anger tendencies	-0.691	0.3536	-1.957	.050(*)
Depressive tendencies	-0.963	0.336	-2.867	.004*
Perceived loss of privilege	0.251	0.268	0.936	.349
Preference of gut feeling over expertise	1.076	0.371	2.903	.004*
Appeal of populist communication style	0.986	0.459	2.147	.032*

Logistic regression analysis of the effect of each variable on voting preference.

Note. Significant effects are marked in bold, significant p-values are marked with \*. Marginally significant p-values are marked with (\*).

This regression analysis shows the relative importance of the impact each variable has on voting preference. Conservative is coded as 1, while liberal is coded as 0. As the t-test already showed, feminine and masculine personality traits both had no significant effect on voting behaviour. Anger tendencies have a marginally significant impact towards liberal voting behaviour, meanwhile depressive tendencies have a very significant effect on the preference for liberal voting behaviour. The perceived loss of privileges does not have a significant relative importance in this regression model. The preference of one's gut feeling over listening to expertise, as well as the appeal of a populist communication style both play a significant role in predicting conservative voting behaviour.

#### 4.4 Mediation analysis

Since the main effect of gender differences in voting behaviour was not found to be significant in this sample, a mediation analysis of the variables would be redundant and was therefore not conducted.

# 4.5 Overview of hypotheses

Finally for a better overview, all hypotheses mentioned previously are gathered in the table below with the result of being either confirmed or rejected.

# Table 9

An overview over all hypotheses and whether they were confirmed or rejected.

Hypothesis	Confirmed/Rejected
Gender and voting behaviour	
H1a: Female voters have a stronger preference for liberal parties than male voters.	Rejected
H1b: Male voters have a stronger preference for conservative parties than female voters.	Rejected
Gendered personality traits	
H2a: Women are more likely to exhibit feminine traits than men.	Confirmed
H2b: Men are more likely to exhibit masculine traits than men.	Rejected
H2c: Feminine traits are related to a preference for liberal parties.	Rejected
H2d: Masculine traits related to a preference for conservative parties.	Rejected
H2M: The effect of gender on voting preference is mediated by differences in personality traits.	Rejected
Emotional tendencies	
H3a: Women are more likely to show more anxious tendencies.	N.A.
H3b: Women are more likely to show more depressive tendencies.	Rejected
H3c: Men are more likely to show higher tendencies for anger.	Rejected
H3d: Anxious tendencies are related to a preference for liberal parties.	N.A.
H3e: Depressive tendencies are related to a preference for liberal parties.	Confirmed
H3f: Tendencies for anger proneness are related to a preference for conservative parties.	Rejected
H3M: The effect of gender on voting preference is mediated by differences in emotional tendencies.	Rejected
Perceived loss or gain of privilege	
H4a: Women are more likely to perceive a gain of privilege.	N.A.
H4b: Men are more likely to perceive a loss of privilege.	Confirmed
H4c: A perceived gain of privilege for women is related to a preference for liberal parties	N.A.

H4d: A perceived loss of privilege for men is related to a preference for conservative parties.	Confirmed	
H4M: The effect of gender on voting preference is mediated by differences in perceived loss or gain of privileges.	Rejected	
Appeal of a populist communication style		
H5a: Women are less likely to find populist rhetoric appealing.	Confirmed	
H5b: Men are more likely to find populist rhetoric appealing.	Confirmed	
H5c: The lack of appeal of populist rhetoric is related to a preference for liberal parties.	Confirmed	
H5d: The appeal of populist rhetoric is related to a preference for conservative parties.	Confirmed	
H5M: The effect of gender on voting behaviour is mediated by differences in the appeal of a populist communication style.	Rejected	
Trust in science vs trusting one's gut feeling more than science/experts		
H6a: Women are more likely to listen to the advice of experts and less likely to prefer their own gut feeling.	Rejected	
H6b: Men are more likely to dismiss the advice of experts and more likely to prefer their own gut feeling.	Rejected	
H6c: Trust in science is related to a preference for liberal parties.	Confirmed	
H6d: A mistrust in science is related to a preference for conservative parties.	Confirmed	
H6M: The effect of gender on voting behaviour is mediated by differences in trust in science.	Rejected	

### 5. Discussion

In this section, the results of the analysis will be interpreted and put into context of the theoretical framework and previous findings. Additionally, the theoretical and practical contributions of this study, the limitations of this research, implications for future research, and a final conclusion will be discussed. This study aimed to answer the research question of whether there is a gender gap in voting preference between liberal and conservative parties, how gender impacts certain effects and how they in turn impact voting behaviour, as well as if these effects mediate this gap, which has not been researched previously.

#### 5.1 Main findings

Overall, this study did not reveal a significant trend of a gender gap in voting behaviour. However, it showed how gender influences several relevant traits, such as feminine personality traits, the perceived loss of privilege and the appeal of populist rhetoric. Furthermore, the research revealed that anger and depressive tendencies, the perceived loss of privilege, the trust in gut feeling over science and the appeal or populist rhetoric also significantly influence voting behaviour. These effects will be discussed in more detail in this section.

The lack of evidence of a gender gap differs from the analysis of official statistics of German voting behaviour, as the gender division in voting for liberal or conservative parties is found to be relatively large (Hudde, 2023). While previous research shows a large gap particularly in the younger generation that decreases in older generations, controlling for age did not show any significant results in this sample. However, a clear and significant trend of women voting with a preference for liberal parties was found. Surprisingly, the men in this sample also had a larger preference for liberal parties over conservative ones, which directly contrasts the official German voting statistics (Datenhandbuch des Deutschen Bundestages, 2022). It should be taken into consideration that due to social desirability bias, participants may be inclined to avoid uncomfortable answers. Previous studies, such as the one by Hudde (2023) remark on the fact that participants may omit or hide their voting choice for socially

undesirable parties - such as the AfD. Therefore, it is possible that participants hid their true voting choice in order to appease social desirability.

Most of the hypotheses stated in this study could not be confirmed, which could be due to the sample size or wording of some questions. However, some interesting results were found: women are indeed more likely to show feminine traits, such as caring more about others, being compassionate and showing more empathy, as previous research has confirmed. Although the effect of feminine personality traits on voting behaviour was not significant, it did show the trend of pushing towards liberal parties, which is in line with previous research (McDermott, 2013). Particularly with voting for the Green Party, as sustainable behaviours are often related to feminine traits (Brough et al, 2016), which received the most votes by women - but also by men - in this sample. While masculine traits did not have any significant effects overall, the general trends of masculine traits having a potential positive effect on voting for a conservative party and men being more likely to exhibit those traits, such as being assertive, competitive and dominant with being male, as well as having a higher likelihood of voting for a conservative party (Ellemers, 2018; Coffé, 2019).

Emotional tendencies for depression and anger both had a significant and positive effect on voting for a liberal party, which was surprising as research has previously shown that anger impacts voting preference in a conservative direction (Kettle & Salerno, 2017). According to former research, anger is often related to anti-immigration attitudes, resource competitiveness and protectiveness, which drives individuals towards conservative or even right-wing parties. However, in this study, the contrary is the case. Anger pushes voters towards liberal parties, which could be due to a similar feeling of protectiveness over resources - but more in the sense of sustainable behaviour and policies for this. The support for left-wing parties from individuals with higher depressive tendencies is consistent with other studies, such as the one by Bakker (2023). The general non-significant trends of both anger and depressive traits, showed that both are slightly more likely expressed by women. While this is in line with previous studies about depressive tendencies, which have consistently been found to be higher in men than in women. Since these questions were very

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personal, there is also the possibility of social desirability bias and not wanting to show 'weakness' or disclose this information, which can lead to skewed results.

A loss of male privilege was significantly more likely to be perceived by men than women and significantly impacted the preference for a conservative party. This confirms previous research and the notion that men may be more reluctant to support gender equality measures if those measures threaten their group privilege, as a study by Scheepers et al. (2009) shows. Furthermore, this explains why conservative parties with a more traditional ideology and authoritarian values would be more appealing to men who fear losing their privilege and status. Moreover, it would be interesting to study if an improved scale for the perceived gain of privilege of women would yield any results in this regard.

The findings for the appeal of populist communication style also confirm previous research that men are significantly more receptive towards populist rhetoric than women, and influences voting behaviour in favour of conservative parties (Agius et al., 2020; Bobba et al., 2018). Since the scale for this construct did not show a great reliability, these results should be seen with caution and should be improved for further research. It should also be noted that not all conservative parties use populist rhetoric and some liberal parties also communicate in a populist style. Previous research has indicated that populist parties often use feelings of anger, which women scored higher on in this study. This implies that there are most likely other factors in the appeal of populist rhetoric, such as directness and being anti-establishment, that matter more for the attractiveness than the use of emotional appeals.

Confirming previous research that found how lower levels of trust relate to voting for more conservative parties, the findings in this study have also shown this effect. As described by Haltinner & Sarathchandra (2022) and Jäckle et al. (2023), this is likely due to the prioritization of personal freedom and the economy over the concern for climate science and trust in those specific experts. However, contrary to the hypothesis, there is no significant impact of gender on a lower level of trust in science and a greater preference for feelings-based decision-making over the advice of experts. Previously, studies have found women to be more likely to trust science on the topics of climate science and Covid-19 measures, whereas men have often been found to dismiss health experts' advice. These findings also contradict studies that have found men to be overconfident in their abilities, which is related to trusting one's own research over the advice given by experts as well as a

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distrust in science (Ariel et al., 2018; Vranic et al., 2022). However, these discrepancies could be due to the small range of scale items, as well as the wording of some of the questions, which will be further discussed in the section for limitations.

The relative importance of the variable effects showed how especially depressive tendencies, the preference of listening to one's own gut feeling over the advice of experts, as well as the appeal of a populist communication style, are significant in their impact on voting behaviour. These relevant traits should be particularly considered in future research.

Since there was not a significant gender gap found in this sample, the question of whether effects mediate the gender gap in voting preference can not be answered in this study. However, a potentially mediating effect of the relevant traits should be studied in a more representative sample.

### 5.2 Theoretical contributions

This research paper inspected a multitude of scientific and journalistic articles in order to deduce a theoretical approach. While most of the articles focused on one aspect of the gender gap on voting behaviour (Abendschon & Steinmetz, 2014; Hudde, 2023) or how one variable influences either gender or voting behaviour (Agius et al., 2020; Bakker, 2024; Bobba et al., 2018; Ellemers, 2023; Fischer et al., 2004; Gauchat, 2012), this study connects these concepts and brings them together to paint a bigger picture. In this way, the gender gap in voting behaviour was examined in multiple angles and analysed in its different facets and factors. This deepens our understanding of the characteristics of the gender gap and helps to find explanations for this divide. By taking several underlying factors into consideration, this study contributes by not only investigating how the potentially relevant traits are influenced by gender and impact voting behaviour, but also how important they are in relativity. Particularly depressive tendencies and the appeal of a populist communication style stand out in the way they are influenced by gender and importance of their effect on voting behaviour. While this study did not reveal a gender gap in voting behaviour, it contributed several important factors that should be considered as potential mediators in future research.

### **5.3 Practical contributions**

As mentioned, this study proposes multiple relevant factors that are impacted by gender and influence voting preference. These factors should be considered to understand voters and their concerns that impact their voting choice.

Because the tendency for depression is an important trait that particularly influences voters in their choice to vote for liberal parties, both liberal and conservative parties can implement changes and policies to appease the emotional needs that accompany depressive tendencies in order to win voters in their favor. Currently, liberal parties most likely attract these voters with strategies to increase the hopes and chances for a more sustainable and egalitarian future. However, this trust of the voters in the promises for a better future seems to have decreased as the most recent European election showed. Therefore, liberal parties would be well advised to reaffirm their efforts towards sustainability and equality, while this strategy would also benefit conservative parties in order to win these voters over. Implementing an improved support system for individuals with depressive tendencies - such as a better plan for the availability of therapy spots without excessive waiting times - would also be a feasible strategy to appease the needs of these particular voters. Additionally, it opens up an important conversation about men's mental health and may help to decrease the barrier of seeking help.

Furthermore, the appeal of a populist communication style currently pushes mainly male voters towards conservative parties. A straight-forward and direct style of communication and addressing difficult, as well as controversial topics head on is something liberal parties might also benefit from to attract male voters. This also helps to decrease the distance between politics and everyday life, which makes voters feel more involved and understood. While only using messages with emotional appeal would not be advisable, the occasional usage of emotional messages is helpful to reach these voters and build a connection to them.

Lastly, the impact of the perceived loss of privilege by male voters should also be considered by both ideological parties. For liberal parties, this could entail implementing strategies to support gender equality without threatening a loss of privilege in this way. In any case, opening the discussion about these feelings and trying to understand the underlying concerns of those male voters could help to create better strategies and decrease the resistance towards gender equality measures.

### **5.4 Limitations**

This research was not without limitations. Firstly, the sample of participants for this study was skewed towards a liberal party preference overall; especially a favour of the green party, which does not adequately depict the official statistics of the last election nor the results from the most recent election for the European Parliament. This is mainly due to the social environment this survey has been shared in, despite efforts to a more diverse range of participants. The gender gap in voting was especially pronounced in the younger age groups from 18 - 34 in the 2021 election (Hudde, 2023). However, this could not be confirmed in this study, which could be due to the number of participants in each age group. Another significant factor is the impact of timing, as the current election is the European election. This election differs slightly in voting preference due to the lower percentage threshold for political parties. The main parties usually have the advantage of being voted for, because voters do not want their vote to be wasted on a party that will not make it over 5% to get into the German parliament. However, this rule does not apply for the European election, which results in more scattered votes on smaller parties. For the purpose of this study, this should not have a substantial impact, as it does not affect the liberal and conservative ideology behind the vote. Notably, a considerable number of participants, especially women, chose to abstain for this option compared to the number of the last election.

The non-significance of the main effect of gender on voting preference in this sample led to a lot of following analyses also resulting in non-significant findings. Additionally, the questionnaire included some limitations due to statements that were not worded right and were therefore misunderstood. It would have potentially been improved by pre-testing the survey with a few participants. This resulted in items being excluded from analysis, for instance all anxiety scale items, as well as statements regarding a perceived gain of privilege for women. A pre-test of the survey could have shown if the scale items measure the intended constructs adequately and could have improved the study overall. Furthermore, all effects measured in the analyses were rather small, which limits the validity and explanatory power of the confirmed hypotheses.

Considering these limitations, there are certainly points of improvement and caution for further research.

### 5.5 Suggestions for future research

While this study has contributed in many ways, there are several points to consider for further research. A larger and more representative sample would clarify how much each construct contributes to this gap more efficiently. Potential pre-testing and improvements of the scales used in the study would also lead to more reliable results. The concepts analysed in this study, but especially depressive tendencies and the appeal of a populist communication style, should be further investigated on their mediating effect. However, since this was not an exhaustive number of underlying factors, other potentially mediating factors should also be considered in future research.

### **5.6** Conclusion

The central research question of if there is a gender gap in liberal and conservative voting preference, and in what way certain constructs mediate this relationship, was only partially answered in this study. Even though no significant gender gap on voting preference was found within this sample, there are a few effects that impact voting behaviour which are in turn impacted by gender. Especially the effects of a perceived loss of male privilege and the appeal of populist rhetoric stood out to have significant effects of gender and on voting behaviour in a conservative direction. But also the effect of depressive tendencies on voting behaviour, considering gender differences within the variable.

While this study has found interesting effects and confirmed some of the hypotheses aimed to answer, there are several implications and nudges for further research. Most importantly, the gender gap of voting behaviour as well as the mediating effects should be studied on a bigger, representative sample that resembles the actual voting behaviour of the population in Germany. This way, the effects would be accurately measured and would yield valid results. As some constructs analysed in this research found marginally significant mediating effects, such as the effect of perceived loss of privilege and appeal of populist communication style, further research studying these mediators more intensely with a larger sample should be done. Furthermore, improved reliability of the scales measuring the constructs might lead to better and stronger results in future research.

# Disclosure of AI usage

In this research paper, AI support in terms of ChatGPT and Grammarly were used to correct my English in terms of spelling and phrasing, as well as for coding help in R.

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# Appendix A

Full survey as seen by the participant.

Dear participant,

You are being invited to participate in a research study titled **personal characteristics and voting behaviour**. This study is being done by **Leonie von den Berken as bachelor thesis** from the Faculty of Behavioural, Management and Social Sciences at the University of Twente.

The purpose of this research study is to understand to what extent personal characteristics and voting preference are related **and** may take approximately **10 - 15** minutes to complete. The data will be used for research and educational purposes only.

Your participation in this study is entirely voluntary and anonymous, your answers cannot be used to identify you. You can withdraw at any time but I hope you complete the questionnaire, as only completed surveys can help me in my research.

We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach is always possible. To the best of our ability your answers in this study will remain confidential. We will minimize any risks by **storing the data safely and delete the raw data as soon as possible.** 

Thank you for your efforts and time!

If you have any questions or want further information, please contact: Bachelor Thesis student: Leonie von den Berken, <u>l.s.vondenberken@student.utwente.nl</u> Thesis supervisor: Menno de Jong, <u>m.d.t.dejong@utwente.nl</u>

After reading the information above, do you understand and agree to participate in this study?

- Yes
- No

What is your gender?

- Male
- Female
- Nonbinary
- Other (please specify)

What is your age?

Who did you vote for in the last election?

- SPD
- Die Grünen
- CDU/CSU
- Die Linke

- AFD
- FDP
- Other (please specify)

Who would you vote for now?

- SPD
- Die Grünen
- CDU/CSU
- Die Linke
- AFD
- FDP
- Other (please specify)

Please indicate to what extent the following traits apply to you. Kind reminder that you cannot be identified by your answers, please answer honestly. (Strongly Disagree, disagree, Neither agree nor disagree, Agree, Strongly Agree)

- 1. I am eager to soothe hurt feelings.
- 2. I am not really interested in how other people feel.
- 3. I am sympathetic.
- 4. I am compassionate.
- 5. I am competitive.
- 6. I care about myself more than about others.
- 7. I am assertive.
- 8. I am willing to take risks.
- 9. I am affectionate.
- 10. I am dominant.
- 11. I am independent.
- 12. I am ambitious.
- 13. I am polite.
- 14. I get a strong urge to help when I see someone who is upset.
- 15. I am sensitive to the needs of others.
- 16. I defend my own beliefs.
- 17. I feel protective over what I consider mine.
- 18. I am understanding.
- 19. I can make decisions easily.
- 20. I am gentle.
- 21. Somebody else's happiness makes me feel happy too.
- 22. It upsets me to see someone being treated disrespectfully.
- 23. I consider myself a warm person.
- 24. I care about others more than myself.
- 25. I become irritated when someone cries.
- 26. I do not feel sympathy for people who cause their own serious illness.

How often do you feel the following: mix questions (Never, Rarely, Sometimes, Often, Very often)

- 1. I get angry easily.
- 2. I feel scared without any good reason.
- 3. I experience trembling (for example, in the hands).
- 4. I feel that I have nothing to look forward to.

- 5. I am aware of the action of my heart in the absence of physical exertion (for example, sense of heart rate increase, heart missing a beat).
- 6. I can get angry at any time.
- 7. I am unable to become enthusiastic about anything.
- 8. I feel I am not worth much as a person.
- 9. It makes me angry when things don't go the way I want.
- 10. If someone contradicts me, I get angry.
- 11. I am worried about situations in which I might panic and make a fool of myself.
- 12. I feel annoyed when not given recognition for doing good work.
- 13. I feel that life is meaningless.
- 14. I get angry when slowed down by other mistakes.

To what extent do you agree to the following statements: (Strongly Disagree, disagree, Neither agree nor disagree, Agree, Strongly Agree)

- 1. Women have gained more power and influence in various spheres of German society.
- 2. Efforts to promote gender diversity in leadership positions have provided more opportunities for women in Germany.
- 3. Women in Germany are experiencing advancements in employment, education, or family life because of efforts to promote gender equality.
- 4. Men in Germany are experiencing a loss of privilege or status due to efforts to promote gender equality.
- 5. Men's social and economic status in Germany has been affected by increasing gender equality.
- 6. Men in Germany are experiencing disadvantages in employment, education, or family life due to efforts made to promote gender equality.

To what extent do you agree to the following statements: (Strongly Disagree, disagree, Neither agree nor disagree, Agree, Strongly Agree)

- 1. Scientific theories are trustworthy.
- 2. We cannot trust scientific theories to be unbiased.
- 3. I find scientific experts to be reliable and trustworthy.
- 4. Scientists don't care if laypersons understand their work.
- 5. Scientists make their findings too complex and complicated.
- 6. I trust myself to use common sense to decide how to make sense of society.
- 7. I believe that scientific research conducted by experts is generally more reliable than relying solely on my own intuition or common sense.
- 8. My gut feeling is often proved right.
- 9. I trust my gut feeling more than listening to an expert.

To what extent do you agree to the following statements: (Strongly Disagree, disagree, Neither agree nor disagree, Agree, Strongly Agree)

Politicians tend to be too vague in their communication.

- 1. I appreciate direct and straightforward communication in politics.
- 2. Politicians should be less politically correct in their communication.

- 3. I appreciate when politicians are not afraid to address controversial topics.
- 4. Politicians should be able to speak their minds.
- 5. Politicians should be able to appeal to emotions.
- 6. I relate easier to political messages with emotional appeal.

This aim of this research study is to find out, to what extent certain factors may mediate between gender and voting preference between liberal and conservative parties. Based on this information, do you still consent to your response being used in this study?

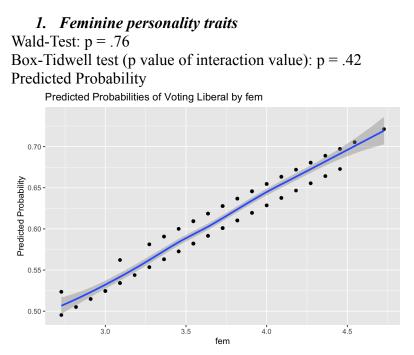
- Yes
- no

Thank you again for your time and effort and helping me conduct the research for my bachelor thesis, I appreciate it greatly. Please share this survey with people around you to help me graduate, but please remain confidential about the contents and true aim of the study. If you want to leave a comment about the topic or the survey, please feel free to do so:

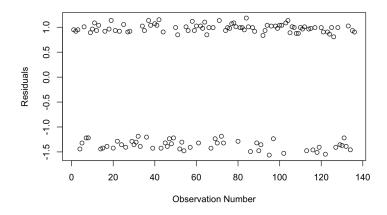
If there are any further questions or comments, you can also contact the researcher (<u>l.s.vondenberken@student.utwente.nl</u>) or thesis supervisor (<u>m.d.t.dejong@utwente.nl</u>).

# **Appendix B**

Assumptions for t-tests and regression analysis



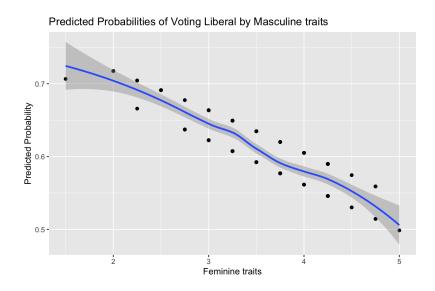
Multicollinearity: Feminine traits = 1.08, Male = 1.08 Hosmer-Leweshow test (Goodness of Fit test):  $\chi^2$ =14.05, df = 8, p = .08 Independence of errors



Cook's Distance: No value greater than 1, no extreme outliers found.

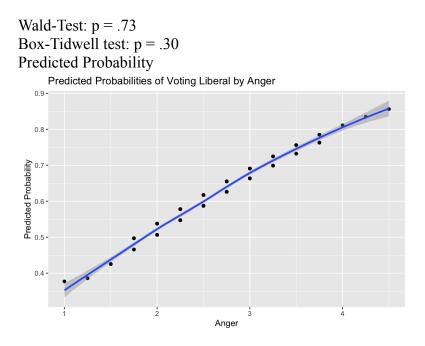
#### 2. Masculine personality traits

Wald-Test: p = .61Box-Tidwell test: p = .34Predicted Probability

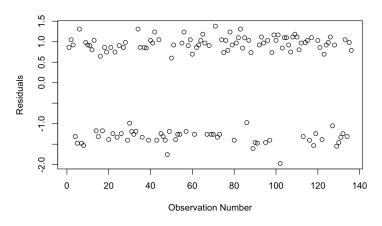


Multicollinearity: Masculine traits = 1.01, Male = 1.01 Hosmer-Leweshow test (Goodness of Fit test):  $\chi^2$ =9.42, df = 7, p = .22 Independence of errors Cook's distance

### 3. Anger tendencies

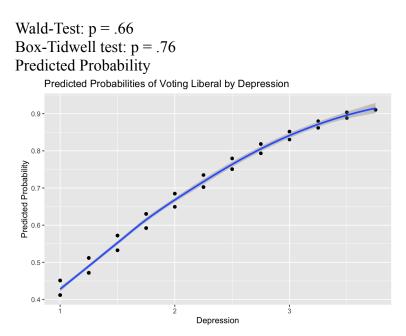


Multicollinearity: Anger tendencies = 1.01, Male = 1.01 Hosmer-Leweshow test (Goodness of Fit test):  $\chi^2$ =7.16, df = 8, p = .52 Independence of errors

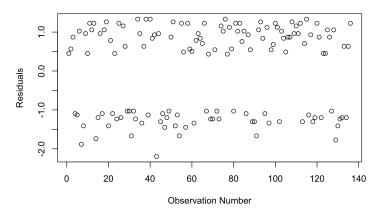


Cook's distance: No greater value than 1.

## 4. Depressive tendencies

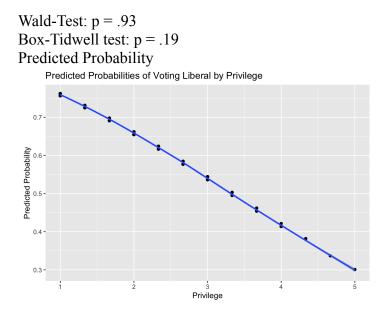


Multicollinearity: Depressive traits = 1.01, Male = 1.01 Hosmer-Leweshow test (Goodness of Fit test):  $\chi^2$ =10.50, df = 8, p = .23 Independence of errors

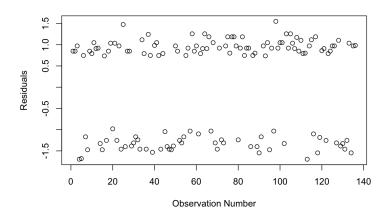


Cook's distance: No greater value than 1.

# 5. Perceived loss of privilege

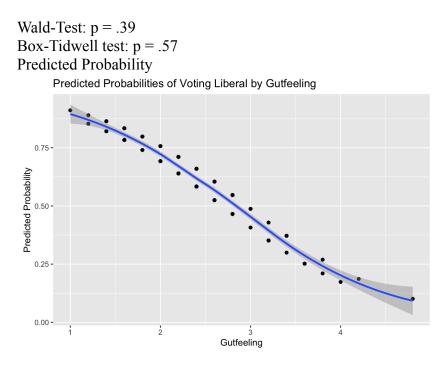


Multicollinearity: Perceived loss of privilege = 1.05, Male = 1.05 Hosmer-Leweshow test (Goodness of Fit test):  $\chi^2$ =6.08, df = 8, p = .64 Independence of errors

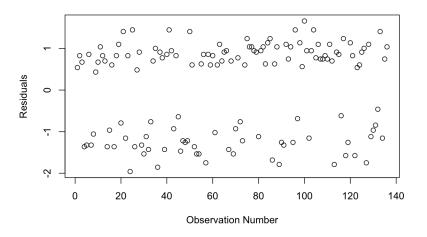


Cook's distance: No greater value than 1.

# 6. Listening to gut feeling over experts' advice



Multicollinearity: Gut feeling = 1.01, Male = 1.01 Hosmer-Leweshow test (Goodness of Fit test):  $\chi^2$ =5.06, df = 8, p = .75 Independence of errors

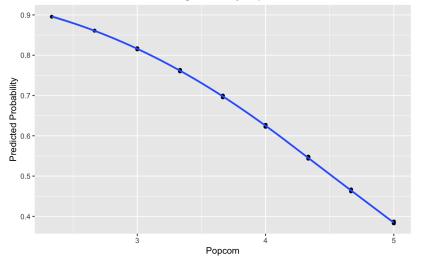


Cook's distance: No greater distance than 1.

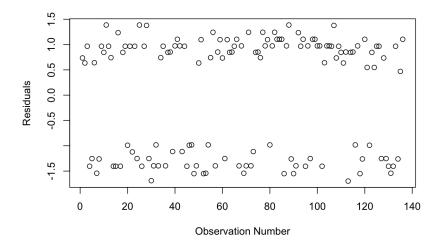
### 7. Populist rhetoric

Wald-Test: p = .96 Box-Tidwell test: p = .25 Predicted Probability

Predicted Probabilities of Voting Liberal by Populist Rhetoric



Multicollinearity: Populist communication style= 1.04, Male = 1.04 Hosmer-Leweshow test (Goodness of Fit test):  $\chi^2$ =2.65, df = 5, p = .75 Independence of errors



Cook's distance: No greater value than 1.

# Appendix C

# Table 8

Choice of who participants voted for in the last election and who they would vote for now.

Party	Women		Me	Men		<b>Total Votes</b>	
	Number	%	Number	%	Number	%	
		Choi	ice last election	!			
SPD	11	7%	15	10%	26	17%	
Die Grünen	28	18%	26	17%	54	35%	
CDU/CSU	12	7%	13	9%	25	16%	
Die Linke	9	6%	2	1%	11	7%	
FDP	7	5%	10	7%	17	11%	
AFD	3	2%	2	1%	5	3%	
Abstained	1	1%	3	2%	4	3%	
Other	5	3%	5	3%	10	6%	
	Liber	al vs Conse	rvative parties	last electio	n		
Liberal	53	35%	45	30%	98	65%	
Conservative	22	15%	26	17%	48	32%	
Unknown	1	1%	5	3%	6	4%	
		(	Choice now				
SPD	6	4%	12	8%	18	12%	
Die Grünen	24	16%	18	12%	42	28%	
CDU/CSU	12	8%	15	10%	27	18%	
Die Linke	6	4%	2	1%	8	5%	
FDP	6	4%	7	5%	13	9%	
AFD	4	3%	5	3%	9	6%	
Abstained	6	4%	3	2%	9	6%	
Other	12	8%	14	9%	26	17%	
	L	iberal vs Co	onservative par	ties now			
Liberal	42	27%	41	27%	83	54%	
Conservative	24	16%	29	19%	53	35%	
Unknown	10	7%	6	4%	16	11%	

# Table 9

/ariable Liberal		Conservative		t(150)	р	
	Mean	SD	Mean	SD		
Feminine personality traits	3.7	0.5	3.6	0.5	-0.700	.485
Masculine personality traits	3.5	0.6	3.7	0.5	1.277	.204
Anger tendencies	2.6	0.6	2.6	0.7	-0.269	.788
Depressive tendencies	2.0	0.8	1.7	0.7	-1.810	.072(*)
Perceived loss of privilege	2.3	0.8	2.6	0.8	2.312	.022*
Preference of gut feeling over expertise	2.6	0.7	2.3	0.6	2.801	.005*
Appeal of populist communication style	4.0	0.5	4.3	0.4	3.250	.001*

Impact of each variable on voting preference last election.

Note. Significant effects are marked in bold, significant p-values are marked with \*.