

The Role of Gender System Justification and Feminism in Anti-Scientific Attitudes

Alexandra Done-Zikeli

S3369722

Department of Psychology, University of Groningen

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Supervisor: Prof. Dr. Flavio Azevedo

Second evaluator: Prof. Dr. Simon Dalley

In collaboration with: Angeliki Strati, Nicola Zang, Thabo Chiluvane, and Oliwia Nadolna

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Abstract

Science denial and anti-scientific beliefs have gained increased popularity amidst recent societal events such as the COVID-19 pandemic and public safety threats like climate change and anti vaccine movements. This study builds upon past research by using a nationally representative sample of 1500 US citizens to explore the relationships between gender system justification, feminist identity, and anti-scientific attitudes. While gender system justification is hypothesised to be positively associated with anti scientific beliefs, feminism is hypothesised to be negatively correlated while also acting as a potential moderator. The results show that gender system justification is a statistically significant predictor for anti-scientific beliefs, which suggests that individuals who uphold gender norms may be more likely to be sceptical towards scientific findings. A negative relationship is found between feminist identity and anti-scientific attitudes, with feminism additionally acting as a significant moderator for the relationship between gender system justification and anti-scientific attitudes. It is concluded that investigating such ideological factors and their influence on anti-scientific beliefs can help foster a society in which scientific findings are met with more trust and acceptance.

Keywords: gender system justification, feminism, scientific scepticism, anti scientific attitudes

The Role of Gender System Justification and Feminism in Anti-Scientific Attitudes

The ever-evolving nature of scientific inquiry has contributed to a deep understanding of our world. Scepticism towards scientific findings, however, remains prevalent and has even been said to be on the rise, despite the increasing body of research supporting scientific claims (Rutjens et al., 2021). Recent societal events, like the COVID-19 pandemic, have brought the denial of scientific facts by certain social groups, such as anti-vaxxers, and individuals to the forefront of public discourse (Gauchat, 2012). The prevalence and potential consequences of anti-scientific attitudes in society have been underscored by a multitude of public health and safety concerns. One example being climate change, which has been both studied and denied for decades (Björnberg et al., 2017). Although climate change has previously been defined as a multiplier of threats for society by the United Nations (2017), only 46% of Americans believe that it could harm them personally (Ballew et al., 2019). Understanding the underlying factors that drive the prevalence of scientific scepticism in society on topics that pose a direct threat is therefore of importance to foster trust in scientific findings and promote evidence-based decision-making among the general public.

Certain factors such as religiosity, system justification, and political ideology have previously been established as predictors of anti-scientific attitudes (Azevedo & Jost, 2021). The present study inspects the associations between the specific political and social constructs of feminism and gender system justification and anti-scientific attitudes, operationalised through scientific scepticism and trust in ordinary people versus scientists.

Gender System Justification in Contemporary Society

The beliefs falling under the umbrella of gender system justification, often referred to as gender stereotypes or traditional gender roles, have gained significant attention in psychological

research (Eagly, Wood, and Diekmann, 2000). In a societal landscape characterised by increasing awareness of social inequalities, the investigation of factors that contribute to the rationalisation and maintenance of inequality and traditional gender roles is of great importance. In the current body of psychological literature, gender system justification has been linked to conservative attitudes as well as an acceptance of the status quo. In contrast, low general system justification has been linked with positive attitudes towards progressive societal change (Liekiefett & Becker, 2022). As our society continues to grapple with a multitude of issues such as the previously highlighted topics of public health or climate change, the mission of identifying factors that may hinder the efforts to successfully combat issues collectively gains importance. Understanding the intricate relationships between gender system justification and scientific scepticism may uncover valuable insights into how traditional gender roles contribute to the persistence of scientific scepticism in contemporary society. Exemplary, climate change has been established as a potential mental health threat for women and men alike (Obradovich & Minor, 2022). However, seeking help for mental health issues can challenge traditional gender norms, as men often face the stereotype that they should be self-reliant. Men who strongly align with the norms of the gender system may therefore be more sceptical of findings that declare mental health issues, as a result of climate change, a threat for themselves.

Feminist Identity

Social and political identities play an essential role in how individuals perceive the world around them. While feminism is not monolithic and cannot be encompassed in a single political ideology, it is generally said to be a political, social, and cultural movement with the goal of challenging -and ultimately ending- gender-based inequality and oppression (Rupp & Taylor, 1999). Viewing the relationship between anti-scientific attitudes and gender system justification

through the lens of feminism offers a unique perspective on how personal beliefs can shape an individual's trust in evidence provided by modern science. With feminist ideology putting the status quo into question and aiming at dismantling oppressive systems, while gender system justification rationalises those exact systems, the two variables seem conflicting in nature. This conflict is highlighted in present research involving conservative women in the United States, which, while often gender-conscious, do not align themselves with the feminist identity (Schreiber, 2008). Women who engage in justification of the gender system have further been shown to be less likely to engage in collective actions that aim at improving conditions for women in society, underscoring the difference in agency between the two political beliefs. (Mouafo & Nzekaih, 2021). These opposing perspectives offered by feminist identity and gender system justification may provide valuable insights into the mechanisms through which beliefs related to the construct of gender may influence how receptive an individual is to scientific facts.

The Present Research

This thesis aims to explore the relationship between feminist identity, gender system justification, and scientific scepticism to answer the research question “Do feminist identity and gender system justification influence anti-scientific attitudes?”. This question is of particular relevance when put in the context of grasping the influence that ideological factors can have on an individual's attitudes towards science. For this research, anti-scientific attitudes are conceptualised by the constructs of scientific scepticism and trust in ordinary people vs. scientists.

The first hypothesis is that there is a positive relationship between the constructs gender system justification and scientific scepticism as well as trust in ordinary people vs. scientists, based on the idea that individuals whose attitudes align with the systems that uphold traditional

gender norms may be more sceptical towards scientific findings that put the status quo into question. The second hypothesis is that feminism is negatively correlated with scientific scepticism and trust in ordinary people vs. scientists. This is based on the notion that individuals who identify as feminists may have perspectives on the credibility of scientific findings and experts in the field of science that differ from the attitudes of those who hold attitudes that are in agreement with the societal standards around gender roles. The third and final hypothesis is that feminism has a significant moderating effect on the association between gender system justification and scientific scepticism. It is suspected that individuals identifying more strongly with feminist ideals will be less likely to endorse and rationalise gender-based power hierarchies and inequalities.

Methods

Sample

The present study conducted research on a quota sample of 1,500 U.S. citizens from August 16 to September 16, 2016, before the 2016 U.S. presidential election. The sampling was conducted through the market research firm Survey Sampling Incorporated, a business that specialises in surveys, from a panel of more than 7 million American individuals. To create a nationally representative sample that reflected the distribution of the 2014 American Community Survey, the participants were chosen based on certain characteristics such as income, age, gender, and education.

According to the survey, 52% of participants were female, 48% of participants male, and their ages ranged from 18 to over 65. In particular, 12.87% of participants were between the ages of 18 and 24, 17.6% were between the ages of 25 and 34, and 17.53% were between the ages of 35 and 35 and 44 years old, 19.47% were between 45 and 54 years old, 15.6% were between 55

and 65 years old, and 16.93% were over 65 years old. The ethnic distribution of the sample was predominantly White (82.47%), with Black/African American (7.67%), Latino (5.87%), Asian/Pacific Islander (1.93%), Native American (0.87%), and Middle Eastern (1.2%) participants also represented.

The sample's religious composition was as follows: 67.6% Christians, 3.47% Jews, 0.6% Muslims, 15.33% atheists or agnostics, with 13% declining to respond or being undecided. In terms of education, 3.4% of participants indicated that they had not completed high school, 31.67% said they had, 31.4% said they had attended some college, including earning an associate's degree, 20.67% said they had a bachelor's degree, and 12.87% said they had a graduate or professional degree.

The study also examined the distribution of household income, with the median income ranging between \$35,000 and \$49,999. 11.87% of participants made less than \$15,000, 12% made between \$15,000 and \$24,999, 11.73% made between \$25,000 and \$34,999, and 15.13% made between \$35,000 and \$49,999, between \$50,000 to \$74,999, 19.47%, 12.8% made between \$75,001 and \$99,999 dollars, 10.67% between \$100,000 and \$149,999 dollars, and 6.33% made \$150,000.

Overall, the study offers a conclusive picture of the socioeconomic and demographic features of a sample of 1,500 American residents in 2016, just before the 2016 U.S. presidential election, that is nationally representative.

Measures

Trust in Ordinary People vs. Scientists

Two statements that measured participants' trust in scientific experts as opposed to regular people were used to assess the variable "Trust in ordinary people vs scientists." These

included the reverse-scored claims, "When it comes to really important questions, scientific facts don't help very much" and "I'd rather put my trust in the wisdom of ordinary people than the opinions of experts and intellectuals" A 9-point Likert scale was used to gather responses (1 being strongly agree, and 9 being strongly disagree). The responses for both items were reverse-scored so that a higher score indicates a higher level of trust in ordinary people over scientists. Neither item was recommended for removal in the Exploratory Factor Analysis (EFA), with the measure showing reasonably good internal consistency with a Cronbach's alpha of = 0.73. The inter item correlation was found to be significant at $r = .57$.

Scientific Scepticism

Scientific Scepticism was assessed using a single item containing the statement "We believe too often in science, and not enough in faith and feelings". A 9-point Likert scale (1 = strongly agree, 9 = strongly disagree) was used to measure participants' agreement with the statement. This item was reverse scored for the current analysis so that high scores on this item indicate higher levels of scientific scepticism.

Feminist Identity

Feminist Identity was assessed by investigating participants' attitudes towards feminism as a social movement. Using a 9-point Likert scale (1 = extremely positive, 9 = extremely negative), participants indicated their views on feminism by answering the question: "How positive or negative do you feel concerning the following (social) movements? Feminism". This item was reverse scored to ensure high levels of agreement align with a high score on the item.

Gender System Justification

To assess the variable gender system justification, participants rated how much they personally agree with the following nine statements: "In general, relations between men and

women are fair”, “The division of labour in families generally operates as it should”, “Gender roles need to be radically restructured”, “For women, the United States is the best country in the world to live in”, “Most policies relating to gender and the sexual division of labour serve the greater good”, “Everyone (male or female) has a fair shot and wealth and happiness”, “Sexism in society is getting worse every year”, “Society is set up so that men and women usually get what they deserve”. The reverse coding of all items except “CSJ_Gender_3” and “CSJ_Gender_8” was adjusted prior to performing the analysis. A 9-point Likert scale (1 = strongly agree, 9 = strongly disagree) was used to measure the degree of agreement. The Cronbach’s Alpha coefficient equals 0.79, with no item being recommended for removal in the EFA. The overall inter-item correlation was found moderate at $r = 0.33$.

Procedure

The statistical analysis of the data was performed using R, JASP, and SPSS. Linear regression analyses were performed to investigate gender system justification and feminism as predictors of scientific scepticism and trust in ordinary people vs. scientists in order to test the first two hypotheses of this thesis. To assess the potential moderating effect of feminism on the relationship between gender system justification and both scientific scepticism and trust in ordinary people vs. science, an additional model including both independent variables was used in a regression to test the third hypothesis. Demographic variables were included in the analysis of all models. Upon request of the thesis supervisor, no outlier analysis or removal was performed on this data.

Results

Descriptive Statistics

Descriptive statistics of each construct are contained in Table 1. The relationship between gender system justification and scientific scepticism, as well as trust in ordinary people vs.

scientists was found to be positive and significant, shown in Table 2 and Table 3, confirming the first hypothesis proposed for this thesis. The second hypothesis stated that feminism would be negatively correlated with anti-scientific attitudes. This hypothesis was also confirmed by the results which indicate a negative association between the constructs of feminism and both scientific scepticism and trust in ordinary people vs. scientists (depicted in Table 2 and 3). The hypothesised moderating role of feminism on the relationship between gender system justification and scientific scepticism and trust in ordinary people vs. scientists was shown to be significant by the results obtained during this analysis, with feminism and gender system justification showing a significant interaction effect for both models.

Table 1

Descriptive Statistics

	Mean	Standard Deviation
Scientific Scepticism	5.09	2.720
Trust in Ordinary People vs. Science	4.54	2.05
Gender System Justification	5.44	1.37
Feminism	5.61	2.23

Table 2*Correlation Matrix: Scientific Scepticism Model*

Variables	Scientific Scepticism	Gender System Justification	Feminism	Age	Education	Income	Sex
Scientific Scepticism	-						
Gender System Justification	0.245*	-					
Feminism	-0.263*	-0.377*	-				
Age	0.133*	0.186*	-0.085*	-			
Education	-0.189*	0.045	0.039	0.211*	-		
Income	0.168*	0.168*	-0.019	0.229*	0.485*	-	
Sex	0.291	0.291*	-0.193*	0.198*	0.088*	0.095*	-

Note: Correlations significant at $p < .05$ are marked with an Asterix.

Table 3

Correlation Matrix: Trust in Ordinary People vs. Scientists Model

Variables	Trust in Ordinary People vs. Scientists	Gender System Justification	Feminism	Age	Education	Income	Sex
Trust in Ordinary People vs. Scientists	-						
Gender System Justification	0.195*	-					
Feminism	-0.213*	-0.377*	-				
Age	0.046	0.186*	-0.085*	-			
Education	-0.212*	0.045	0.039	0.211*	-		
Income	-0.09*	0.168*	-0.019	0.229*	0.485*	-	
Sex	0.014	0.291*	-0.193*	0.198*	0.088*	0.095*	-

Note: Correlations significant at $p < .05$ are marked with an Asterix.

Inferential Statistics

As a means to assess normality, a Shapiro-Wilk test was used (depicted in Table A1). Its' results were significant, which means the null hypothesis of the test cannot be rejected. This may potentially indicate a violation of the normality assumption. However, based on the size of the sample used, a violation of the normality assumption does not necessarily cause problems, as samples including over 40 participants have been said to still be appropriate for parametric analysis when this assumption is violated (Ghasemi & Zahediasl, 2012). This is further confirmed by the skewness and kurtosis levels, which were all found to be within the acceptable range (shown in Table A1). The linearity and homoscedasticity assumptions were tested with the use of residual plots (shown in Figure A1 to A6). Neither assumption was violated. All values

regarding the tolerance and variance inflation factor (VIF) are shown in Table A2 and depict values within the acceptable range ($VIF < 10$) for all constructs, indicating that there are no significant multicollinearity issues in the data.

The models used to test the hypothesis that gender system justification is positively associated with scientific scepticism and trust in ordinary people vs. scientists explain a significant but rather small amount of variance in the first model ($R^2 = 0.124$, $F(5, 1494) = 42.315$, $p < 0.001$) as well as the second model ($R^2 = 0.092$, $F(5, 1494) = 30.247$, $p < 0.001$). A significant positive correlation between gender system justification and scientific scepticism ($r = 0.187$, $p < 0.001$) and trust in ordinary people vs. scientists ($r = 0.15$, $p < 0.001$) is shown in Table 2 and Table 3, revealing that higher scores in gender system justification to be associated with higher scores in both constructs. These results support the first hypothesis underlying the thesis.

The models testing the hypothesis that feminism is negatively correlated with both scientific scepticism ($R^2 = 0.127$, $F(5, 1494) = 43.433$, $p < 0.001$) and trust in ordinary people vs. scientists ($R^2 = 0.093$, $F(5, 1494) = 30.497$, $p < 0.001$) explain a small but significant amount of variance. The hypothesis is further confirmed by the negative correlation between feminism and scientific scepticism ($r = -0.819$, $p < 0.001$) and trust in ordinary people vs. scientists ($r = -0.151$, $p < 0.001$) shown in Table 4 and 5. A higher score in feminism would therefore be associated with lower scores in scientific scepticism and trust in ordinary people vs. scientists.

To assess the possible role of feminism as a moderator, models containing the interaction term between feminism and gender system justification were used. These model explained a small but significant amount of variance for scientific scepticism ($R^2 = 0.114$, $F(5, 1494) = 64.099$, $p < 0.001$) and trust in ordinary people vs. scientists ($R^2 = 0.074$, $F(5, 1494) = 39.734$, $p < 0.001$). Feminism is established to be negatively correlated with gender system justification as

well as both constructs used to conceptualise anti-scientific attitudes with correlations depicted in Tables 2 and 3. A higher score on feminism is therefore associated with lower scores on gender system justification and scientific scepticism and trust in ordinary people vs. scientists, confirming the third hypothesis.

The demographic constructs included in the analysis that were found to be significant predictors are age ($r = 0.15, p < 0.001$), education ($r = -0.190, p < 0.001$), and sex ($r = -0.083, p < 0.001$) in the scientific scepticism model and age ($r = 0.065, p = 0.012$), education ($r = -0.209, p < 0.001$), and sex ($r = -0.051, p = 0.047$) in the trust in ordinary people vs. scientists model. Income was found to be an insignificant predictor in both models. Education is negatively correlated with both constructs of anti-scientific attitudes, indicating that higher levels of education are associated with lower levels of scientific scepticism and trust in ordinary people vs. scientists.

Table 4

Coefficients Table: Scientific Scepticism Model

	Unstandardised	Standard Error	Standardised Coefficients	t	p
Gender System Justification	0.373	0.054	0.187	6.946	<0.001
Feminism	-0.225	0.031	-0.819	-7.301	<0.001
Age	0.248	0.042	0.150	5.948	<0.001
Education	-0.478	0.069	-0.190	-6.899	<0.001
Income	-0.067	0.037	-0.051	-1.832	0.067
Sex	-0.045	0.138	-0.083	-3.267	0.001

Table 5*Coefficients Table: Trust in Ordinary People vs. Scientists Model*

	Unstandardised	Standard Error	Standardised Coefficients	t	p
Gender System	0.232	0.041	0.155	5.591	<0.001
Justification					
Feminism	-0.135	0.024	-0.151	-5.694	<0.001
Age	0.081	0.032	0.065	2.518	0.012
Education	-0.395	0.053	-0.209	-7.394	<0.001
Income	-0.028	0.028	-0.028	-0.990	0.322
Sex	-0.211	0.106	-0.051	-1.983	0.047

Discussion

The present study examined the relationship between anti-scientific attitudes and the ideological factors of gender system justification and feminism. The findings of the study provide important insights on the significance of feminist identity and gender system justification as predictors for scientific scepticism and trust in ordinary people vs. science, which the construct scientific scepticism is composed of. The findings indicate that higher levels of gender system justification are a significant predictor for greater levels of anti-scientific attitudes in individuals with the results showing a small but significant positive correlation. Feminism, on the other hand, is negatively correlated with anti-scientific attitudes with higher levels in agreement with feminist ideals being associated with lower levels of anti-scientific beliefs. Additional findings on the influence of feminism as a possible mediator show feminism to have a significant mediating role in the relationship between gender system justification and anti-scientific attitudes. Higher levels of feminism are found to be associated with lower levels of

both gender system justification and anti-scientific attitudes. The results align with all three hypotheses proposed at the outset of the research and can offer valuable insights into the interconnectedness of the three variables of interest.

Limitations

Certain potential restrictions and limitations of this study deserve mentioning. One being the generalisability of the findings being constrained by the geographically-specific nature of the sample. While the sample size is large, it consists solely of participants from the United States. Consequently, caution is recommended when trying to extend these findings to other cultural or national groups. While the focus on the US can provide useful insights on the matter of political disparities between individuals belonging to Republican or Democrat groups, this binary is not representative of the global political landscape. Certain kinds of anti-scientific attitudes, such as climate change denial for instance, have been found to be more prevalent in the US compared to other countries (Rutjens et al., 2022). A strong alignment of partisanship and ideology may play a role in this, as they have been found to exacerbate polarisation in previous research and may potentially lead to more extreme views towards scientific findings, be it in favour or against, depending on party identification (Iyengar et al., 2019). This study also does not account for the role that partisanship may play in both the spread of anti-scientific beliefs (Rao et al., 2020; Motta et al., 2020) and gender system justification, which could be investigated by further research.

Another notable limitation is the fast-evolving nature of how anti-scientific beliefs are able to spread in modern society. Since the data for this study was collected in 2016, it does not account for the increased spread of pseudo facts and science denial that occurred, especially on social media, during the COVID-19 pandemic (Lee et al., 2023). This, combined with the changes that occurred in the political landscape of the US during the pandemic as well as during the 2016 and 2020 election (Kydd, 2021) and the increased spread of misinformation surrounding the election online (Grinberg et al., 2019) may impact the generalisability of the results with regards to the political climate in the US today.

What also needs to be noted is that the dependent variables making up the construct of anti-scientific attitudes in this study, scientific scepticism and trust in ordinary people vs. scientists, were measured using only one and two items respectively. This may potentially put the construct validity of the study into question. Future research that centres attitudes towards

scientific findings over political behaviour, which the data collection of this study was aiming for, could provide more insights given the use of more robust measures of attitudes towards science.

Theoretical and Practical implications

Consistent with the existing body of scientific literature, the findings of this study revealed a significant positive correlation between gender system justification and anti-scientific attitudes. This suggests that individuals whose attitudes are in line with systems that uphold and encourage traditional gender roles may be more sceptical towards scientific findings that are not in agreement with the status quo. Traditional gender roles often fall within the right-wing political umbrella, which has previously been linked with lower levels of trust in the scientific community compared to individuals with liberal political identity (Gauchat, 2012; Kraft et al., 2015). In the specific geographic and cultural context of the sample that is of relevance for this study, the upholding of traditional gender norms may be linked to individuals who align more with a republican political orientation. This finding is particularly relevant when viewed through the lens of current societal challenges such as public health and climate change, in which new scientific evidence can often contradict the beliefs and pre-established norms held onto by individuals who align with republican values (Hamilton, 2011). Future research may aim to further the understanding of the mechanisms through which gender system justification and political orientation can influence trust in scientific facts. More specifically, shining light on the factors that influence the perception of scientific credibility may yield useful information that can be utilised to tailor public health strategies and policies to ensure they effectively reach and engage individuals who hold anti-scientific beliefs.

Feminist identity is shown to be negatively associated with anti-scientific attitudes based on the data, which aligns with the second hypothesis of this thesis. Feminism is commonly associated with the left political spectrum which has been shown to be positively linked with the acceptance of scientific facts in the existing body of scientific literature (Hamilton, 2011; Drummond & Fischhoff, 2017). This finding further contributes to the understanding of the role identity plays in the acceptance of scientific facts. While the work of individual feminists remains of great importance for the movement, feminism is said to be a movement that operates as a collective of individuals who are passionately engaged in a shared cause (Evans & Chamberlain, 2015). Understanding the negative association between feminist identity and

anti-scientific beliefs may therefore provide an opportunity to inform strategies for public engagement with scientific findings. For example, efforts to communicate science could leverage feminist networks to promote scientific literacy further. The exploration of the intersectionality of feminism and other identities, such as sexual orientation or race, as well as anti-scientific attitudes is beyond the scope of the current study but should be investigated further by future research.

The results regarding the third hypothesis establish feminism as a significant moderator for the relationship between gender system justification and anti-scientific attitudes. When feminism is included in the model, there is a significant decrease in both the levels of gender system justification and anti scientific attitudes. These findings may be due to individuals who identify themselves as feminists and those whose personal beliefs are in line with traditional gender roles having differing perspectives when it comes to the credibility of scientific facts. This finding is consistent with the aims of feminism as a social movement which can be summarised as challenging traditional gender roles and advocating for the establishment of gender equality (Sperling et al., 2001). These ideals directly oppose the concept of gender system justification, which does not question, but instead justify the maintenance of societal structures that aid in upholding the power hierarchies in a patriarchal society. The findings provide a glimpse into how gender-related beliefs and identities can shape attitudes towards scientific findings. This information has many potential practical implications. For instance, understanding and addressing the dynamics between feminism, gender system justification, and anti-scientific attitudes may lead to the development of informational campaigns that resonate more effectively with different audiences based on their identity.

Conclusion

By examining the interplay between feminist identity, gender system justification, and anti scientific attitudes the present study is able to shed light on ideological factors that can shape an individuals' attitudes towards scientific findings. Both the alignment with feminist identity as well as the agreement with gender system justification were found to play a significant role in the prediction of anti-scientific attitudes with feminism additionally playing a significant moderating role between gender system justification and anti-scientific attitudes.

The findings of this study highlight that fostering a society in which scientific findings are widely trusted and accepted as facts requires not only an understanding of potential

ideological barriers to such trust and understanding, but also a commitment to the values and principles that encourage critical thinking and scientific literacy. This could include dismantling systems of gender inequality in contemporary society and challenging political ideologies that prioritise pre-established rules and systems over scientific findings and evidence-based decision making.

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Appendix A

Figure A1

Residuals vs. Predicted: Scientific Scepticism Full Model

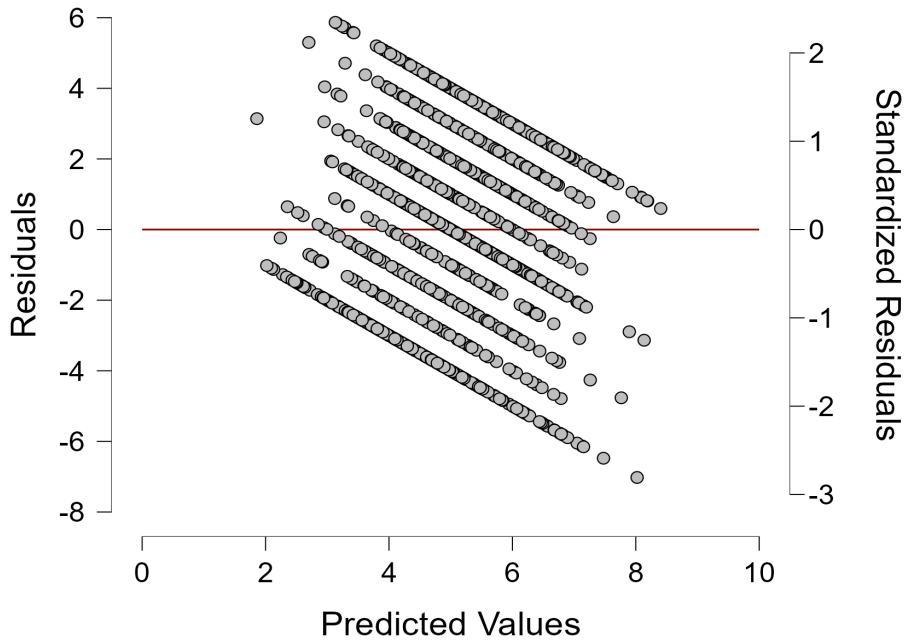


Figure A2

Residuals vs. Predicted: Scientific Scepticism & Gender System Justification

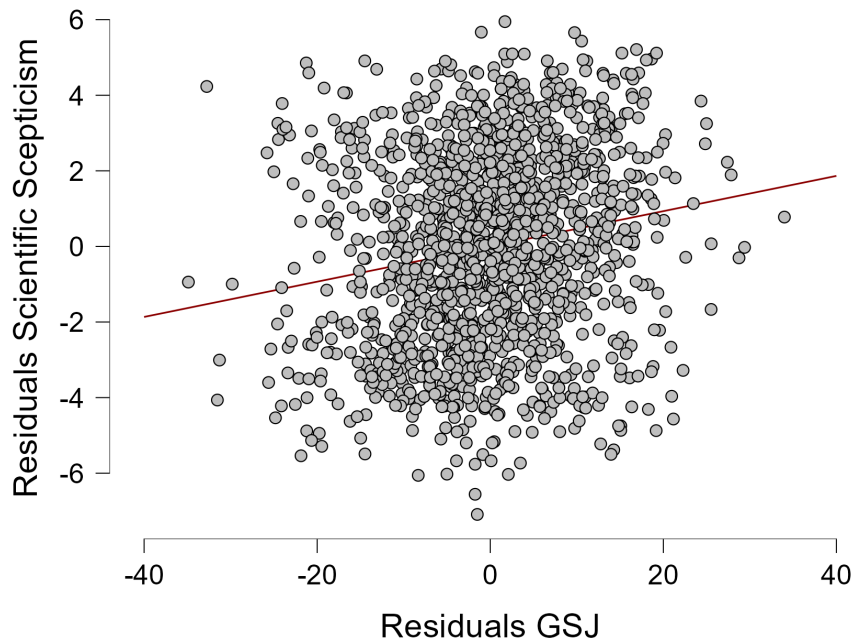
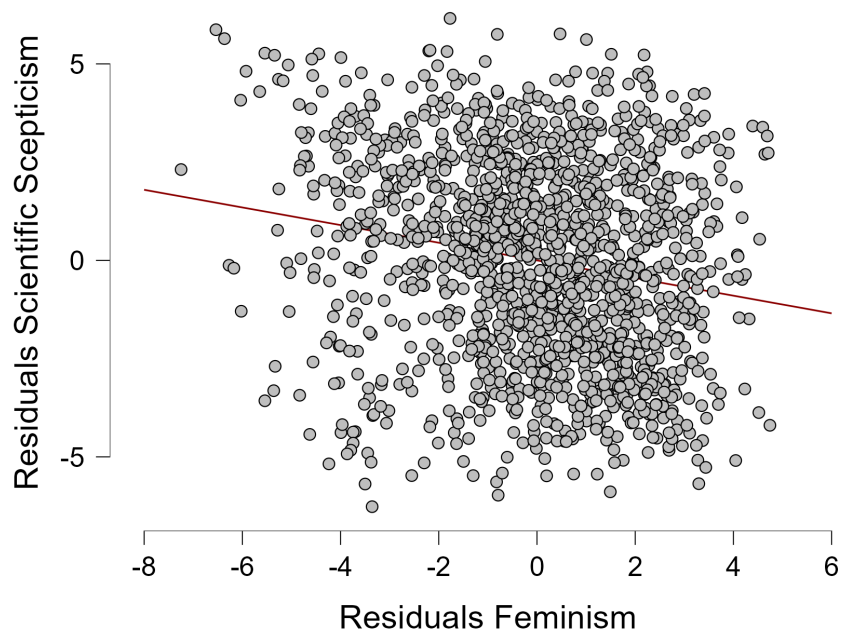


Figure A3

Residuals vs. Predicted: Scientific Scepticism & Feminism

**Figure A4**

Residuals vs. Predicted: Trust in Ordinary People vs. Science Full Model

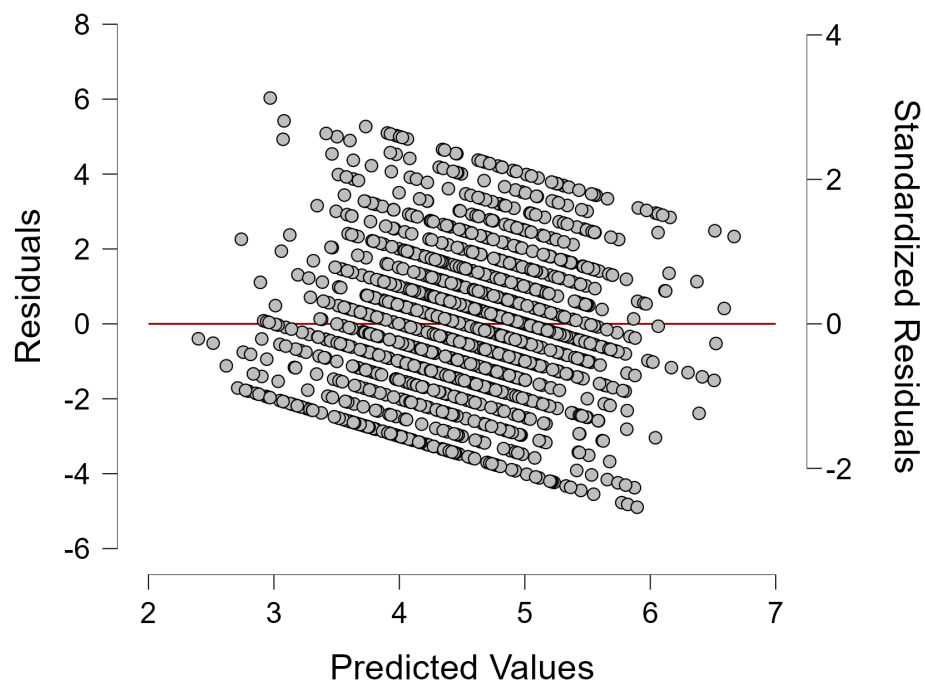
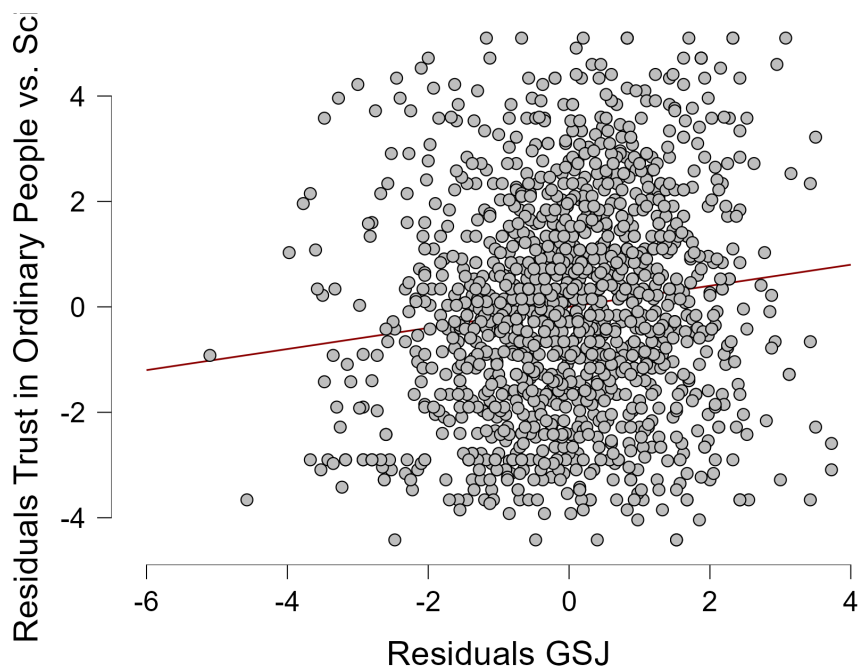


Figure A5

Residuals vs. Predicted: Trust in Ordinary People vs. Scientists & Gender System Justification

**Figure A6**

Residuals vs. Predicted: Trust in Ordinary People vs. Science & Feminism

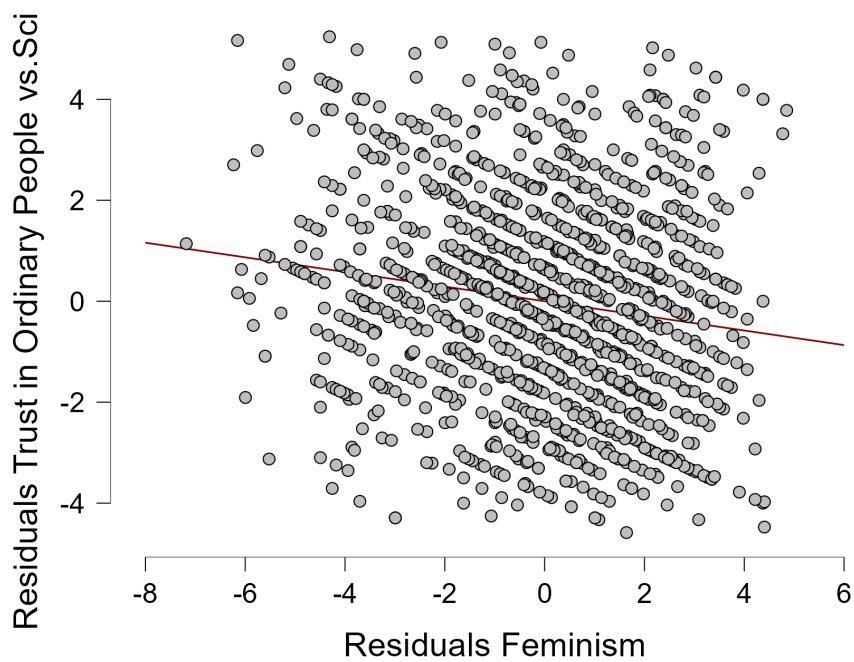


Table A1*Tests of Normality*

	Skewness	Kurtosis	Shapiro-Wilk	P-value
Scientific Scepticism	-0.114	-1.195	0.913	>.001
Trust in Ordinary People vs. Scientists	0.130	-0.495	0.972	>.001
Gender System	-0.204	0.171	0.995	>.001
Justification				
Feminism	-0.379	-0.524	0.933	>.001
Age	-0.20	-1.174	0.916	>.001
Education	0.293	-0.824	0.892	>.001
Income	-0.14	-0.982	0.945	>.001
Sex	0.027	-2.002	0.637	>.001

Note: The Null Hypothesis for the Shapiro-Wilk test cannot be rejected. This brings the normality of the data into question.

Table A2*Multicollinearity Checks: Full Model*

	Tolerance	VIF
Gender System Justification	0.779	1.284
Feminism	0.846	1.183
Age	0.892	1.121
Education	0.748	1.337
Income	0.732	1.366
Sex	0.884	1.132

Note: The multicollinearity assumption was not violated at $p < 0.05$.

Table A3*Model Summary: Scientific Scepticism - GSJ*

Model	R	R Squared	Adjusted R Squared
Scientific Scepticism	0.352	0.124	0.121

Note: Predictors included are GSJ, Education, Age, Gender, Income.

Table A4*Model Summary: Trust in Ordinary People vs. Scientists - GSJ*

Model	R	R Squared	Adjusted R Squared
Trust in Ordinary People vs. Scientists	0.303	0.092	0.089

Note: Predictors included are GSJ, Education, Age, Gender, Income.

Table A5*Model Summary: Scientific Scepticism - Feminism*

Model	R	R Squared	Adjusted R Squared
Scientific Scepticism	0.356	0.127	0.124

*Note: Predictors included are Feminism, Education, Age, Gender, Income.***Table A6***Model Summary: Trust in Ordinary People vs. Scientists - Feminism*

Model	R	R Squared	Adjusted R Squared
Trust in Ordinary People vs. Scientists	0.304	0.093	0.090

*Note: Predictors included are Feminism, Education, Age, Gender, Income.***Table A7***Model Summary: Scientific Scepticism - Moderation*

Model	R	R Squared	Adjusted R Squared
1	0.307	0.094	0.093
2	0.337	0.114	0.112

*Note: Model 1 Predictors include GSJ, Feminism. Model 2 Predictors include GSJ, Feminism,**Interaction Term.***Table A8***Model Summary: Trust in Ordinary People vs. Science - Moderation*

Model	R	R Squared	Adjusted R Squared
1	0.246	0.060	0.059
2	0.272	0.074	0.072

Note: Model 1 Predictors include GSJ, Feminism. Model 2 Predictors include GSJ, Feminism, Interaction Term.