Sciences perceived as precise and consensual are more trusted

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Abstract

Research focused on the United States shows that people's trust in science varies considerably between disciplines. Existing explanations of these trust gaps stress the role of ideology: when people perceive scientists of a particular discipline to be ideologically like-minded, they tend to trust them more. Here, we report two findings: First, trust gaps between disciplines also exist in France: A representative sample of the French population (N = 1,012) trusted researchers in biology and physics more than researchers studying climate science, economics, or sociology. Second, the more precise and consensual participants perceive scientific findings to be, the more they tend to trust the scientists (across and within disciplines). While these findings are correlational, they align with a non-ideological explanation of trust in science: the rational impression account. This account proposes that people can come to trust scientists by relying on basic cognitive inference processes, which tend to be generally rational.

Keywords: trust in science, scientific disciplines, France

People's trust in science varies across disciplines. Altenmüller et al. (2024) found that among 20 different scientific disciplines, participants in the United States (US) trusted mathematicians, physicists, and biologists more than climate scientists or historians, who in turn were more trusted than economists or political scientists. Gligorić et al. (2024) analyzed trust in 45 different disciplines and found that US participants trusted neuroscientists the most, followed closely by various specialists in physics and biology. Psychologists, sociologists, economists, and political scientists were trusted less. Other studies in the US have not looked at trust specifically, but found that people perceive some disciplines as more 'scientific' than others (Gauchat & Andrews, 2018; Suldovsky et al., 2019); their findings align with the discipline trust gaps identified by other papers, with physics and biology being perceived as more scientific by comparison with economics or sociology.

Data from outside the US are rare and investigate fewer scientific disciplines: Schrøder (2023) compared trust in six disciplines and found that Norwegian participants trusted mathematicians and biologists

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more than economists and climate scientists. Schug et al. (2024) found that virologists researching COVID-19 and climate researchers were less trusted than astrophysicists and historians by German participants.

What explains these trust gaps across scientific disciplines? Existing accounts have focused on political and economic ideology. Altenmüller et al. (2024) showed that people assign different political ideologies to scientists in different disciplines. For example, compared to other disciplines, participants in their US sample considered sociologists to be particularly liberal while they tended to see economists as particularly conservative. People tended to trust scientists more when they perceived them to be ideologically aligned with themselves. For example, conservative participants trusted economists more than sociologists, while the opposite was true for liberal participants. Schrøder (2023) investigated the role of economic ideology. In their Norwegian sample, economically left-leaning participants trusted climate scientists more, while economically right-leaning participants trusted economists more.

The present study makes two contributions. First, research on trust differences between scientific disciplines has focused on the US. We extend this research to a new country: France. Although we expect to register broadly similar patterns, some differences with US results might also be obtained, for instance with regard to climate science, which tends to be particularly polarizing in the US (Poushter et al., 2021; Smith et al., 2024).

Second, we seek to better understand why some disciplines are more trusted than others. Existing explanations that focus on ideology depict the public as relying on coarse cues—according to these accounts, what matters is not whether some scientists produce more reliable science, but whether they are ideologically aligned with the individual evaluating them. These accounts thus share with other deficit models of trust in science an idea of the public as unable to properly understand or evaluate science (Bauer et al., 2007; Scheufele, 2022). Here, we offer a complementary explanation of trust gaps between disciplines: the rational impression account of trust in science (for a detailed exposition, Pfänder & Mercier, 2025). According to this account, a series of cognitive mechanisms, each acting broadly rationally, contribute to explaining why people trust scientists: (i) people infer that scientific knowledge is accurate because they perceive it as consensual (Kurvers et al., 2019; H. Mercier & Morin, 2019; Pfänder, De Courson, et al., 2025); (ii) people perceive much of scientific knowledge as not only accurate, but also impressive (rare, precise, difficult to attain), leading them to infer scientists' competence (Dubourg et al., 2025; M. Mercier et al., 2026)—a key dimension of trustworthiness (Besley & Tiffany, 2023; Cologna et al., 2025); (iii) people's impressions of scientists' competence and trustworthiness persist after they forget the specific knowledge that generated them (Liquin & Lombrozo, 2022; Reyna, 2021).

Experimental studies have provided causal evidence that mechanisms proposed by the rational impression account play a role in how people form perceptions of scientists' trustworthiness. The best established evidence relates to point (i): When people are told about the scientific consensus on a given issue, they tend to change their minds in the direction of the consensus (e.g., Van Der Linden, 2021; Van Stekelenburg et al., 2022; Većkalov et al., 2024). People also trust science more when it successfully replicates—a way of solidifying consensus (Hendriks et al., 2020). Based on the evidence from the experimental literature, we should expect to observe an association between perceptions of consensus and trust in scientists in cross-sectional survey data, both across and within disciplines.

H1: People trust scientists more when they are perceived as more consensual.

Regarding point (ii) above, experimental studies suggest that impressive knowledge fosters impressions of scientists' trustworthiness, and that precision is an important dimension of impressiveness. Pfänder, Rouilhan, et al. (2025) manipulated whether participants from a US sample saw texts with general descriptions of a scientific discipline (e.g., "Entomologists study how a swarm of bees organizes, or how ants communicate with each other."), or whether participants saw texts with specific findings and precise measurement techniques from these disciplines (e.g., "Entomologists have shown that some flies can perceive images that are displayed for just three milliseconds"). The participants who read texts about the specific findings were more impressed, perceived the scientists as more competent, and the scientific disciplines as more trustworthy, despite failing to recall most of the details immediately after reading (point (iii) above). These findings suggest that precision—in the sense of making specific claims and providing exact measures—could play an important role in how trustworthy people think a scientific discipline is. Pfänder, De Courson, et al. (2025) manipulated another kind of precision, namely the degree to which different informants converged on a numerical estimate. Participants in this study perceived informants whose estimates converged more as more competent.

Based on these experimental studies, in cross-sectional survey data, we should expect to observe an association between perceptions of precision of science and trust in scientists, both across and within disciplines.

H2: People trust scientists more when they are perceived as more precise.

These hypotheses cannot yield conclusive evidence confirming the rational impression account, or discarding alternative accounts. Instead, these hypotheses provide a minimal plausibility test of the rational impression account, by asking whether predictions derived from the theoretical account, and from existing experimental evidence are validated in cross-sectional survey data.

To test these hypotheses, we rely on a study of a representative sample of the French population that has been conducted alongside a manylabs project on trust in science (Cologna et al., 2025; Mede et al., 2025). In addition to the main survey identical in all countries of the manylabs study, we queried the French sample about their trust in different scientific disciplines, as well as their impressions of these disciplines in terms of precision and consensus. Unless it is mentioned otherwise, the analyses (along with the hypotheses and materials) were pre-registered (https://osf.io/t6cbw), and all data, materials and code are publicly available via this article's OSF project page (https://osf.io/u8f3v/overview).

Method

Participants

We recruited a sample of 1,012 participants representative (quotas for age and gender, see Mede et al., 2025) of the French population (Table 1)[1]. The sampling design used crossed age × gender quotas, targeting five equal age bins (18–29, 30–39, 40–49, 50–59, 60+ years) and an equal gender split (50% male, 50% female). Participants were recruited from online panels by the market research company *Bilendi & respondi*, and were paid for taking the survey. *Bilendi & respondi* maintains opt-in online panels in which members are recruited through a variety of channels, including co-registration partnerships, affiliate networks, and social media advertising. Panel members register voluntarily and provide informed consent to participate in surveys in exchange for incentive points redeemable for vouchers or monetary rewards.

To complete the survey, participants had to be at least 18 years old, agree with the terms and conditions of the consent form, pass a first attention check of writing "213" into a text box, and pass a second attention check of selecting "strongly disagree" for an extra item in a scale of science-related populist attitudes. Data was collected between February 21, 2023 and March 9, 2023. The survey was programmed with the survey software *Qualtrics*. For more details on the data collection, see Mede et al. (2025).

Measures

The complete questionnaires in English and French are available on the OSF project page. Here, we present only the measures used for the study at hand.

[1]Note that this is half of the participants of the overall French sample in the manylabs study (Mede et al., 2025). That is because the sample was (randomly) split into two additional question conditions, one of which used the items we analyze in the present article.

Table 1

Summary table of sample demographics

	Overall, 1012 (100%)[1]
Gender	
Woman	502 (50%)
Man	500 (49%)
Prefer to self-describe	6 (0.6%)
Prefer not to say	4 (0.4%)
Age	
Mean (SD)	44.6 (14.9)
Median	45.0
Min, Max	18.0, 88.0
Education	
Did not attend school	2 (0.2%)
Primary education	6 (0.6%)
Secondary education (e.g., high school)	350 (35%)
Higher education (e.g., university degree or higher education diploma)	654 (65%)
Income	
Mean (SD)	28,728.2 (39,415.5)
Median	25,000.0
Min, Max	0.0, 960,000.0
Residence	
Rural	484 (48%)
Urban	528 (52%)
Religious	
Not religious at all (1)	502 (50%)
(2)	169 (17%)
(3)	203 (20%)
(4)	103 (10%)
Very strongly religious (5)	34 (3.4%)

[1] n (%)

Trust in scientists in general

To measure trust in scientists in general, we follow Mede et al. (2025) who use a composite measure of twelve questions based on Besley et al. (2021) that cover four essential dimensions of trust in scientists: competence, integrity, benevolence, and openness (Table A1). Each dimension is measured by three items, all of which use 5-point Likert scales from 1, lowest trust, to 5, highest trust (e.g., one benevolence item reads: "How eager or uneager are most scientists to improve others' lives?" - "Very uneager" = 1, "Somewhat uneager" = 2, "Neither eager nor uneager" = 3, "Somewhat eager" = 4, "Very eager" = 5). A detailed overview of all items can be found in the supplemental material. For more information on the psychometric properties of the trustworthiness scale, see Mede et al. (2025).

Using this scale presents a deviation from the preregistration, in which we had mentioned building a composite trust measure based on the benevolence and competence dimensions only. Since we have written the pre-registration, however, the more faceted measure has been well validated and it would have seemed arbitrary to rely on only two dimensions. For full transparency, we show that all analyses replicate using our preregistered, reduced trust measure (Section C, Table C1 and Table C2). We also replicate our findings using the same single item trust measure we use to assess trust in scientists of specific disciplines (Section D, Table D1 and Table D2).

Perceptions of scientists across different disciplines

To measure trust in scientists across disciplines, participants were asked "How much do you trust the researchers working in these disciplines? Biology/Physics/Climate science/Economics/Sociology/Science in general [1 = Do not trust at all, 5 = Trust very much]". We proceeded similarly for perceived precision ("How precise do you think the results obtained by researchers in these disciplines are? [1 = Not precise at all, 5 = Extremely precise]") and consensus ("How much do you think researchers in these disciplines agree on fundamental findings? [1 = They do not agree at all, 5 = They agree very much]").

Procedure

Participants first filled out a questionnaire containing 111 variables from the main manylabs survey (Mede et al., 2025), among which the questions about the trustworthiness of scientists in general. After that, they responded to the questions about differences between scientific disciplines.

Results

Figure 1 provides an overview of the results. On average, participants trusted scientists in general above the scale midpoint (scale mid-point was three, mean = 3.457, sd = 0.590). They tended to trust biologists most (mean = 3.779, sd = 0.914), followed by physicists (mean = 3.682, sd = 0.922), climate scientists (mean = 3.471, sd = 1.014), sociologists (mean = 3.138, sd = 0.986), and economists (mean = 2.941, sd = 1.035).

We find evidence supportive of both hypotheses. To test the hypotheses we calculated three different types of models, all with trust as an outcome variable and either precision or consensus as predictor variable. The first type of model assessed associations of these three variables across all disciplines. Measures for all the scientific disciplines were pooled together and mixed effects models with random intercept and slope for participants were conducted. These models account for the fact that each participant provides several ratings, but they do not differentiate between disciplines. The second type of model assessed associations within disciplines. We added random effects for discipline to the previous models, both for the intercept and the slope. These models provide an average estimate of the within-discipline association. Additionally, they provide an estimate of how much this association varies between disciplines (the standard deviation of the random effects). For these two kinds of models, we restricted the data to only discipline-specific measures, excluding perceptions of scientists in general. The third type of model was used to measure the associations regarding science in general. For this purpose, we relied on perceptions of science in general, using the composite measure of trust described above. Since for perceptions of trust, precision, and consensus of scientists in general there was only one measure per participant, we calculated simple linear regression models.

Pooling across disciplines, people tended to trust the scientists of these disciplines more, the more they perceived the results of the scientists' discipline to be precise (H2, $\hat{\beta}_{\text{across disciplines}} = 0.659$, $p < .001$), and consensual (H1, $\hat{\beta}_{\text{across disciplines}} = 0.605$, $p < .001$). These results hold when looking at within discipline variation (precision, H2: $\hat{\beta}_{\text{within disciplines}} = 0.588$, $p < .001$; consensus, H1: $\hat{\beta}_{\text{within disciplines}} = 0.514$, $p < .001$), and at perceptions of scientists in general (precision, H2: $\hat{\beta}_{\text{general}} = 0.383$, $p < .001$; consensus, H1: $\hat{\beta}_{\text{general}} = 0.334$, $p < .001$).

In an exploratory, non-preregistered analysis, we investigated whether people's perceptions of precision and consensus differed. To do so, we pooled all consensus and precision ratings participants gave for the different disciplines (but not science in general) in a long-format dataset. We then ran a mixed model of a binary predictor variable (indicating whether precision or consensus was measured) on the outcome score. We added by-participant and by-discipline random intercepts. Since both variables were assessed on a 5-point Likert scale, we did not standardize the scores. We find that participants, on average, rated scientists as slightly more precise than consensual ($\hat{\beta}_{\text{precision vs. consensus}} = 0.044$, $p = 0.001$; on a scale from 1 to 5).

Discussion and conclusion

French participants' trust was higher in some scientific disciplines (biology and physics) than in others (economics and sociology), with climate science falling in between. These findings align with discipline trust gaps observed in the US (Altenmüller et al., 2024; Gligorić et al., 2024), suggesting some degree of cross-cultural robustness to how scientific disciplines are perceived.

Participants trusted science more when they perceived it as precise and consensual. This pattern held when asking participants about science in general, and when asking about specific scientific disciplines (both across and within disciplines).

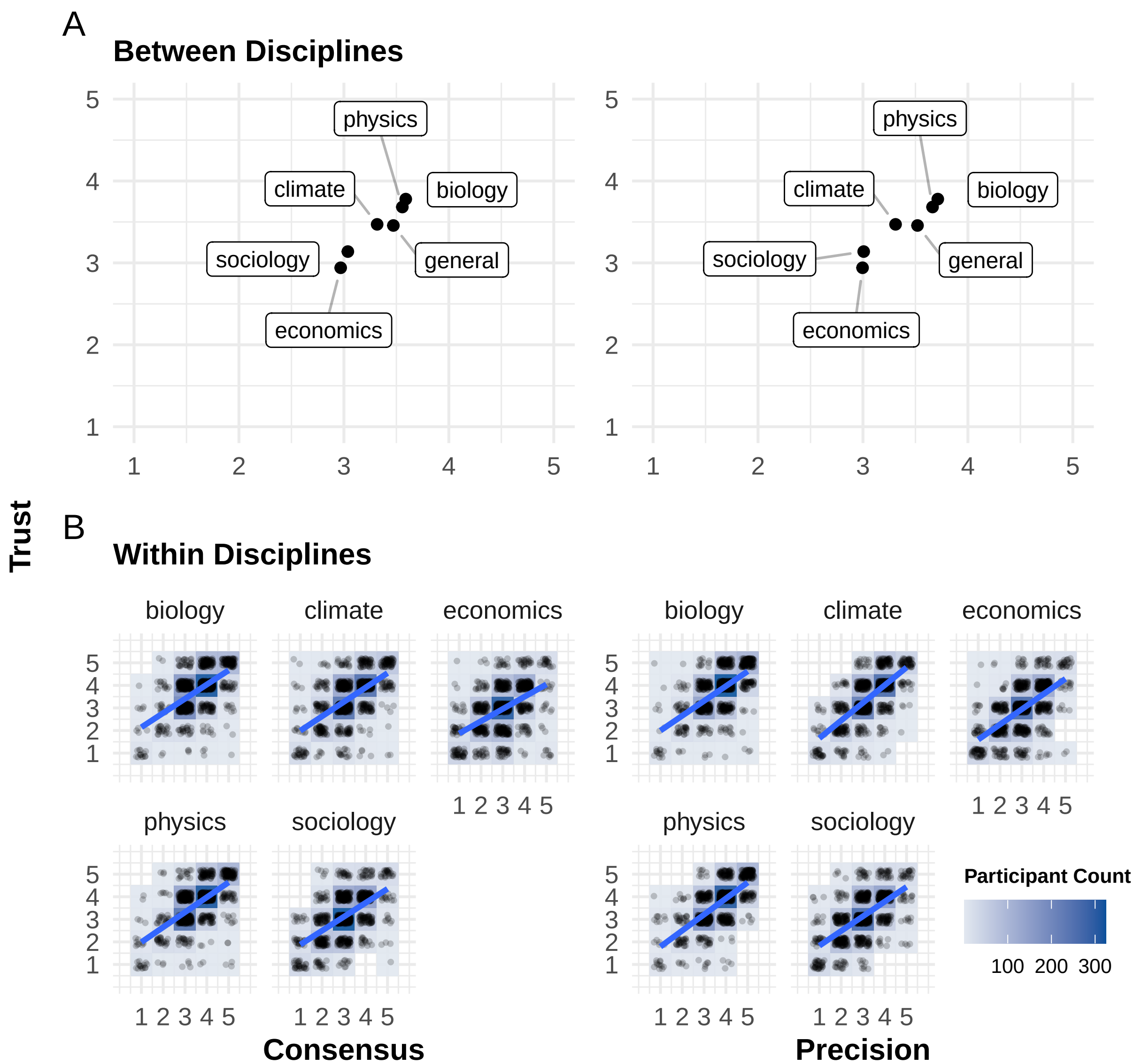
Previous accounts of trust gaps between scientific disciplines have focused on political or economic ideology as an explanatory factor. The results at hand lend support to an alternative explanation: the rational impression account of trust in science (Pfänder & Mercier, 2025). This account predicts that people draw inferences about scientists' trustworthiness by using a suite of basic cognitive information evaluation mechanisms, which are particularly sensitive to perceived consensus and precision (as a clue to impressiveness).

The rational impression account is complementary to other explanations of trust in science and discipline trust gaps, in particular ideology-based explanations: People may build trust through rational impressions for most of science, but also have ideological motivations to distrust specific aspects of science. For example, in the US, it has been shown that even though everyone accepts most basic science facts (Pfänder, Kerzreho, et al., 2025), some people reject very specific scientific results, plausibly because of their relation with religious or political identity (in the case of climate change, see Egan & Mullin, 2017; Smith et al., 2024).

The main limitation of the current results is that they are correlational. These correlations can be confounded, and causality could, in principle, even be reversed: people who, for other reasons, trust a scientific discipline might then say that it is more precise and more consensual, since they are both positive traits—a type of halo effect (for a review, see Forgas & Laham, 2016). Although it is impossible to rule out that the answers are partly driven by a halo effect, two lines of argument suggest it does not account for all of the results. First, it has been shown that people have different impressions of the features of different disciplines, such that for instance they can deem rocket scientists (compared to other scientists) to be competent but less warm, while zoologists are thought to be warmer but less competent (Gligorić et al., 2024). Similarly, in

Figure 1

A. *Plots show the association of consensus (left) and precision (right) with trust between the different disciplines. Dots represent average scores. For reference, we added the score of scientists in general ('general').* ***B.*** *Plots show the same associations but separately for all disciplines. Each dot represents a participant. Note that all scores are integer values ranging from 1 to 5, but dots are jittered within their respective quadrant for better visibility.*



the present results, participants deemed scientists to be slightly more precise than consensual, on average. Second, experiments reviewed in the introduction demonstrating causal effects of consensus and precision (or impressiveness more generally) on trust lend credence to a causal account of the present findings (Kurvers et al., 2019; M. Mercier et al., 2026; Pfänder, De Courson, et al., 2025; Pfänder, Rouilhan, et al., 2025).

Besides the correlational nature of the data, the current study is also limited in not having questions about a broader range of disciplines, or more narrow subdisciplines. A methodological limitation is the reliance on opt-in panels, which are known to over-represent individuals with higher digital literacy, greater interest in surveys, and, in some national contexts, higher levels of education. These limitations should be considered when generalizing our findings to the broader French population.

In the rational impression account, exposure to science is crucial for building trust, whether via education or science communication more generally. The present results provide evidence that might help design more effective science communication strategies. Many experimental studies have already successfully attempted to increase the perception of consensus in specific scientific facts (Van Stekelenburg et al., 2022; Većkalov et al., 2024), and our study confirms a strong association between perceptions of consensus and trust in France. In addition, communication efforts could also stress how precise (and, more generally, impressive) the findings of some scientific disciplines are. For example, in the case of climate science, researchers have computed that during the Last Glacial Maximum (20,000 years ago) the average global temperature had dropped by 6.1 °C, with a 95% confidence interval of −6.5 to −5.7 °C, an impressively accurate estimate (Tierney et al., 2020). Stressing precision and consensus when communicating scientific results, paired with efforts to guide people in making sense of these results, may help build trust even in politicized scientific disciplines.

Data availability

All data and survey materials are available on the OSF project page (https://osf.io/u8f3v/overview). Please note that you'll have to select the linked github repository in order to access the files. The path for the survey materials is "data/qualtrics/".

Code availability

The code used to create all results (including tables and figures) of this manuscript is also available on the OSF project page (https://osf.io/u8f3v/overview). Please note that you'll have to select the linked github repository in order to access the files.

Competing interest

The authors declare having no competing interests.

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Appendix A
Scale for measuring trust in scientists

Table A1

Items of the scale assessing general trust in scientists

Question	Answer Options	Mean (SD)
How open are most scientists to feedback?	Not open = 1, Somewhat open = 2, Neither open nor not open = 3, Somewhat open = 4, Very open = 5	3.103 (0.796)
How willing or unwilling are most scientists to be transparent?	Very unwilling = 1, Somewhat unwilling = 2, Neither willing nor unwilling = 3, Somewhat willing = 4, Very willing = 5	3.103 (0.979)
How much or little attention do scientists pay to others' views?	Very little attention = 1, Somewhat little attention = 2, Neither much nor little attention = 3, Somewhat much attention = 4, Very much attention = 5	2.967 (0.942)
How honest or dishonest are most scientists?	Very dishonest = 1, Somewhat dishonest = 2, Neither honest nor dishonest = 3, Somewhat honest = 4, Very honest = 5	3.441 (0.81)
How ethical or unethical are most scientists?	Very unethical = 1, Somewhat unethical = 2, Neither ethical nor unethical = 3, Somewhat ethical = 4, Very ethical = 5	3.359 (0.803)
How sincere or insincere are most scientists?	Very insincere = 1, Somewhat insincere = 2, Neither sincere nor insincere = 3, Somewhat sincere = 4, Very sincere = 5	3.492 (0.828)
How expert or inexpert are most scientists?	Very inexpert = 1, Somewhat inexpert = 2, Neither expert nor inexpert = 3, Somewhat expert = 4, Very expert = 5	3.735 (0.726)
How intelligent or unintelligent are most scientists?	Very unintelligent = 1, Somewhat unintelligent = 2, Neither intelligent nor unintelligent = 3, Somewhat intelligent = 4, Very intelligent = 5	4.003 (0.717)
How qualified or unqualified are most scientists when it comes to conducting high-quality research?	Very unqualified = 1, Somewhat unqualified = 2, Neither qualified nor unqualified = 3, Somewhat qualified = 4, Very qualified = 5	3.971 (0.691)
How concerned or not concerned are most scientists about people's wellbeing?	Not concerned = 1, Somewhat not concerned = 2, Neither concerned nor not concerned = 3, Somewhat concerned = 4, Very concerned = 5	3.342 (0.882)
How eager or uneager are most scientists to improve others' lives?	Very uneager = 1, Somewhat uneager = 2, Neither eager nor uneager = 3, Somewhat eager = 4, Very eager = 5	3.632 (0.803)
How considerate or inconsiderate are most scientists of others' interests?	Very inconsiderate = 1, Somewhat inconsiderate = 2, Neither considerate nor inconsiderate = 3, Somewhat considerate = 4, Very considerate = 5	3.334 (0.893)

Appendix B
Regression tables main article

Table B1 and Table B2 show the regression tables for the results presented in the main article.

Table B1

Summary of mixed models with trust as outcome and consensus as predictor

	across_disciplines	within_disciplines	science_in_general_only
(Intercept)	1.423***	1.723***	2.298***
	(0.060)	(0.100)	(0.066)
consensus	0.605***	0.514***	0.334***
	(0.017)	(0.017)	(0.018)
SD (Intercept id)	1.156	1.138	
SD (consensus id)	0.308	0.292	
Cor (Intercept~consensus id)	−0.921	−0.911	
SD (Observations)	0.618	0.587	
SD (Intercept discipline)		0.179	
SD (consensus discipline)		0.008	
Cor (Intercept~consensus discipline)		1.000	
Num.Obs.	5052	5052	1012
R2			0.247
R2 Adj.			0.247
R2 Marg.	0.330	0.258	
R2 Cond.	0.620	0.629	
AIC	11 260.0	10 902.7	1521.6
BIC	11 299.1	10 961.5	1536.3
ICC	0.4	0.5	
Log.Lik.			−757.781
F			331.879
RMSE	0.55	0.52	0.51

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table B2

Summary of mixed models with trust as outcome and precision as predictor

	across_disciplines	within_disciplines	science_in_general_only
(Intercept)	1.215***	1.457***	2.110***
	(0.055)	(0.107)	(0.070)
precision	0.659***	0.588***	0.383***
	(0.015)	(0.022)	(0.019)
SD (Intercept id)	1.096	1.104	
SD (precision id)	0.284	0.279	
Cor (Intercept~precision id)	−0.920	−0.915	
SD (Observations)	0.562	0.539	
SD (Intercept discipline)		0.204	
SD (precision discipline)		0.033	
Cor (Intercept~precision discipline)		−0.604	
Num.Obs.	5054	5054	1012
R2			0.276
R2 Adj.			0.276
R2 Marg.	0.413	0.353	
R2 Cond.	0.680	0.685	
AIC	10 421.7	10 163.3	1481.7
BIC	10 460.8	10 222.1	1496.4
ICC	0.5	0.5	
Log.Lik.			−737.836
F			385.829
RMSE	0.50	0.48	0.50

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Appendix C
Regression tables preregistration

As stated in the main article, we had preregistered using a composite measure of only the competence and the benevolence dimensions (see Table A1). We report the results of our models using this measure in Table C1 and Table C2.

Table C1

Summary of mixed models with trust as outcome, as preregistered using benevolence and competence only, and consensus as predictor

	across_disciplines	within_disciplines	science_in_general_only
(Intercept)	1.423***	1.723***	2.543***
	(0.060)	(0.100)	(0.067)
consensus	0.605***	0.514***	0.325***
	(0.017)	(0.017)	(0.019)
SD (Intercept id)	1.156	1.138	
SD (consensus id)	0.308	0.292	
Cor (Intercept~consensus id)	−0.921	−0.911	
SD (Observations)	0.618	0.587	
SD (Intercept discipline)		0.179	
SD (consensus discipline)		0.008	
Cor (Intercept~consensus discipline)		1.000	
Num.Obs.	5052	5052	1012
R2			0.230
R2 Adj.			0.230
R2 Marg.	0.330	0.258	
R2 Cond.	0.620	0.629	
AIC	11 260.0	10 902.7	1557.6
BIC	11 299.1	10 961.5	1572.4
ICC	0.4	0.5	
Log.Lik.			−775.818
F			302.256
RMSE	0.55	0.52	0.52

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table C2

Summary of mixed models with trust as outcome, as preregistered using benevolence and competence only, and precision as predictor

	across_disciplines	within_disciplines	science_in_general_only
(Intercept)	1.215***	1.457***	2.311***
	(0.055)	(0.107)	(0.071)
precision	0.659***	0.588***	0.386***
	(0.015)	(0.022)	(0.020)
SD (Intercept id)	1.096	1.104	
SD (precision id)	0.284	0.279	
Cor (Intercept~precision id)	−0.920	−0.915	
SD (Observations)	0.562	0.539	
SD (Intercept discipline)		0.204	
SD (precision discipline)		0.033	
Cor (Intercept~precision discipline)		−0.604	
Num.Obs.	5054	5054	1012
R2			0.278
R2 Adj.			0.277
R2 Marg.	0.413	0.353	
R2 Cond.	0.680	0.685	
AIC	10 421.7	10 163.3	1493.5
BIC	10 460.8	10 222.1	1508.3
ICC	0.5	0.5	
Log.Lik.			−743.752
F			388.106
RMSE	0.50	0.48	0.50

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Appendix D
Regression tables single-item general trust

We had also assessed trust in scientists in general via a single item ("How much do you trust the researchers working in these disciplines? Science in general [1 = Do not trust at all, 5 = Trust very much]"), along with the measures for the different scientific disciplines. In Table D1 and Table D2 we report the results of our models when relying on this single-item trust question.

Table D1

Summary of mixed models with trust as outcome, using the single-item measure, and consensus as predictor

	across_disciplines	within_disciplines	science_in_general_only
(Intercept)	1.423***	1.723***	1.612***
	(0.060)	(0.100)	(0.096)
consensus	0.605***	0.514***	0.588***
	(0.017)	(0.017)	(0.027)
SD (Intercept id)	1.156	1.138	
SD (consensus id)	0.308	0.292	
Cor (Intercept~consensus id)	−0.921	−0.911	
SD (Observations)	0.618	0.587	
SD (Intercept discipline)		0.179	
SD (consensus discipline)		0.008	
Cor (Intercept~consensus discipline)		1.000	
Num.Obs.	5052	5052	1012
R2			0.321
R2 Adj.			0.321
R2 Marg.	0.330	0.258	
R2 Cond.	0.620	0.629	
AIC	11 260.0	10 902.7	2294.4
BIC	11 299.1	10 961.5	2309.2
ICC	0.4	0.5	
Log.Lik.			−1144.206
F			478.438
RMSE	0.55	0.52	0.75

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table D2

Summary of mixed models with trust as outcome, using the single-item measure, and precision as predictor

	across_disciplines	within_disciplines	science_in_general_only
(Intercept)	1.215***	1.457***	1.154***
	(0.055)	(0.107)	(0.099)
precision	0.659***	0.588***	0.709***
	(0.015)	(0.022)	(0.027)
SD (Intercept id)	1.096	1.104	
SD (precision id)	0.284	0.279	
Cor (Intercept~precision id)	−0.920	−0.915	
SD (Observations)	0.562	0.539	
SD (Intercept discipline)		0.204	
SD (precision discipline)		0.033	
Cor (Intercept~precision discipline)		−0.604	
Num.Obs.	5054	5054	1012
R2			0.399
R2 Adj.			0.399
R2 Marg.	0.413	0.353	
R2 Cond.	0.680	0.685	
AIC	10 421.7	10 163.3	2171.3
BIC	10 460.8	10 222.1	2186.0
ICC	0.5	0.5	
Log.Lik.			−1082.626
F			671.066
RMSE	0.50	0.48	0.71

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001