Differentiating threat perception, worry, and issue salience – A validity assessment

Bomm, L.; Bergmann, P.K.; Bakker, B.N.

DOI
10.31234/osf.io/j6tyg

Publication date
2025

Document Version
Final published version

Differentiating Threat Perception, Worry, and Issue Salience – A Validity Assessment

Linda Bomm, Paul K. Bergmann, Bert N. Bakker

January 22, 2025

Abstract

Societal threat perception, worry, and issue salience are central to research in psychology and political science. Yet, their construct and predictive validity remain underexamined. This study addresses whether these constructs are distinct and whether they yield consistent conclusions about political ideology. Using data from a diverse Dutch sample (N = 1863), we first assessed construct validity by comparing self-reported threat perception, worry, and issue salience across twelve societal issues. Results show that threat perception and worry reflect the same underlying construct, distinct from salience, as citizens find issues more important than threatening or worrying. Second, we evaluated predictive validity by analyzing associations with right-wing ideology. Threat perception and worry correlated similarly with ideology, whereas issue salience often overestimated this relationship (Type M error) but rarely reversed its direction (Type S error). These findings clarify the unique roles of threat perception, worry, and issue salience, offering a validated framework for future research on the threat-politics nexus.

Keywords: Societal threat perception; worry; issue salience; right-wing ideology; construct validity; predictive validity

Introduction

Societal threat perception —- the feeling and perception that something aversive is going to happen —- has been at the core of research in psychology and political science for decades (e.g., Albertson & Gadarian, 2015; Brandt & Bakker, 2022; Crawford, 2017; Godefroidt et al., 2019). Research on societal threat perception employs a variety of different operationalizations of the construct (see, e.g., Crawford, 2017; Jost, 2017; Onraet et al., 2013). Some studies ask about the perceived threat posed by an issue, while others assess the extent to which people are worried about an issue (e.g., Brandt et al., 2021; Conway Iii et al., 2023; Onraet et al., 2013). Relatedly, research in political science studies issue salience, which captures the extent to which people find a topic important (e.g., Bélanger & Meguid, 2008; Leeper & Robison, 2020). This raises a critical question: Are individuals simply threatened and worried by issues they find most important, or do these constructs capture distinct psychological and political dynamics? To date, no systematic effort has been made to compare threat perception, worry, and issue salience measures in terms of their construct and predictive validity, leaving an important gap in the literature. We address this gap and answer the questions: (1) Do threat perception, worry, and issue salience reflect distinct underlying constructs (i.e., construct validity)? (2) Do these measures yield consistent conclusions about social and political attitudes and behavior (i.e., predictive validity)? In doing so, we align with calls for more careful validation of our constructs in psychology (Bringmann et al., 2022; Fabrigar et al., 2020; Flake & Fried, 2020; Flake et al., 2022).

When measuring threat perception, one line of research asks participants to what extent they feel "*threatened*" by an issue or situation (e.g., Conway Iii et al., 2023; Hornsey & Pearson, 2024; Kahn et al., 2022; Pew Research Center, 2020; Smith & Kim, 2024; Stevens & Vaughan-Williams, 2016; Van der Linden, 2015; Willis-Esqueda et al., 2017). For instance, Conway Iii et al. (2023) measured threat perception with the item: "Thinking about [a societal issue] makes me feel threatened." Another line of research focuses on how "*worried*" participants are about an issue or situation (e.g., Brandt et al., 2021; Feldman & Stenner, 1997; Hetherington & Suhay, 2011; Onraet et al., 2013; Schlipphak, 2024; Wong & Cappella, 2009; Woods, 2011). For example, Brandt et al. (2021) assessed worry using the item: "To what degree are you worried about the following situations: [a societal issue]?" A third line of research examines how "*salient*" (important) participants perceive an issue or situation to be (e.g., Bélanger & Meguid, 2008; Ciuk & Yost, 2016; Dias & Lelkes, 2022; Krosnick, 1990; Lavine et al., 1996; Leeper & Robison, 2020; Niemi & Bartels, 1985; RePass, 1971).

For instance, Bélanger and Meguid (2008) measured issue salience using the item: "How important are the following issues to you personally in this election?" One might wonder whether citizens find the issues they feel most threatened or worried by to be the most important, and vice versa. This calls for an examination of the construct validity of these measures. To summarize, our first research question concerns the construct validity of threat perception, worry, and issue salience.

Next, we consider the predictive validity of threat perception, worry, and issue salience by examining their associations with political ideology. Threat perception and worry have been linked to political ideology in psychological research (e.g., Hetherington & Suhay, 2011; Onraet et al., 2013; Smith & Kim, 2024; Willis-Esqueda et al., 2017), while issue salience has been similarly associated in political science (e.g., Bélanger & Meguid, 2008; Leeper & Robison, 2020). If threat perception, worry, and issue salience measure the same construct, their associations with right-wing ideology should be highly similar. However, if these measures capture distinct constructs, treating them as equivalent could result in a Type S (sign) or Type M (magnitude) error (Gelman & Carlin, 2014). A Type S error occurs when the sign of the association reverses (e.g., from positive to negative), depending on whether threat perception, worry, or issue salience are measured. A Type M error arises when the effect size differs substantially across the measures. Despite their relevance, the predictive validity of threat perception, worry, and issue salience in relation to right-wing ideology has not yet been directly compared. To summarize, our second research question concerns the predictive validity of these constructs.

Using a large and diverse sample of the Dutch population collected in 2022, we first assess construct validity by (a) comparing the averages of self-reported threat perception, worry, and salience across twelve societal issues, and (b) examining the correlations between these measures. Second, we assess predictive validity by analyzing how self-reported threat perception, worry, and issue salience for these twelve societal issues correlate with right-wing ideology. For construct validity, we find that across societal issues, threat perception and worry levels are relatively similar, whereas issue salience scores differ substantively. Moreover, threat perception and worry are more strongly correlated with each other than with issue salience. For predictive validity, our results show that the correlations of threat perception and worry with political ideology yield similar conclusions in terms of both sign and effect size. In contrast, issue salience correlations with political ideology frequently result in Type M errors —— though rarely Type S errors —— where the association with ideology is overestimated when relying on the issue salience measure.

Methods

Openness, Transparency and Ethics

We report the results of a secondary analysis of an existing data set. We did not preregister our expectations or analyses. The data and code to reproduce our results can be found on our study's OSF page: https://osf.io/h9fkv/. This study has been approved by the Ethics Review Board of our university [number redacted for peer review]. Before starting the survey, participants signed an informed consent form.

Research Design

We performed our analyses on online-survey data conducted among a large and diverse sample of Dutch respondents. I&O Research collected the data between November 30, 2022 and December 11, 2022. The survey measured issue salience, worry, and threat perception regarding twelve societal issues. For details on the full survey and all measured variables see the survey's OSF page: https://osf.io/d958h (Azrout et al., 2022). Within the survey, participants first completed the issue salience battery, then the worry battery, and finally the threat perception battery. The order of the blocks was fixed, while the order of the items within each block was randomized to avoid anchoring effects.

Sample

Our analyses included data from N = 1863 participants (51.9% male, 47.9% female, 0.16% other, $M_{Sample\ Age} = 52.41$, $SD_{Sample\ Age} = 16.30$; sample education levels: 20.2% low education, 39.5% medium education, 40.3% high education). The sample is, compared to the general Dutch population, comprised of slightly more men than women, older ($M_{Population\ Age\ 2024} = 42.4$, Centraal Bureau voor de Statistiek, n.d.), and somewhat more highly educated (Population education levels: 26.0% low education, 37.0% medium education, 36.4% high education, Centraal Bureau voor de Statistiek, 2024).

Measures

Threat perception, worry, and issue salience were measured for the same set of twelve societal issues, including: climate change, Covid-19, crime, energy costs, the housing shortage, inflation, the influx of asylum seekers, the inhumane reception of asylum seekers, the labour shortage, the nitrogen

problem, polarization, and the war in Ukraine. First, issue salience was measured with the item "*How important do you consider the following problems the Netherlands is currently facing?",* rated on a 7-point Likert scale ranging from 1 (Not at all important) to 7 (Very strongly important) for each issue. Worry was measured with the item "*How worried are you for the (potential) consequences for you personally/your personal situation for each following problems?*", rated on a 7-point Likert scale ranging from 1 (Not at all worried) to 7 (Very much worried) for each issue. Threat perception was measured with the item "*To what extent they do you feel threatened by the following issues?*", rated on a 7-point Likert scale ranging from 1 (Not at all threatened) to 7 (Very strongly threatened) for each issue. All items were "forced response" items and thus have no missing values.

Right-wing ideology was measured with the item *"In politics, people sometimes talk about "left" and "right". Where would you place yourself? Display your position using a scale of 0 to 10, where 0 means "left" and 10 means "right". Which number best describes your position?"*, on a semantic differential scale from 0 (Left) to 10 (Right), a standard and commonly used question to measure political ideology (Huber, 1989). Participants who answered "I don't know" or "I don't want to say" (8%, N=150) were treated as missing values in the predictive validity tests.

Results

Comparing the levels of Threat Perception, Worry, and Issue Salience

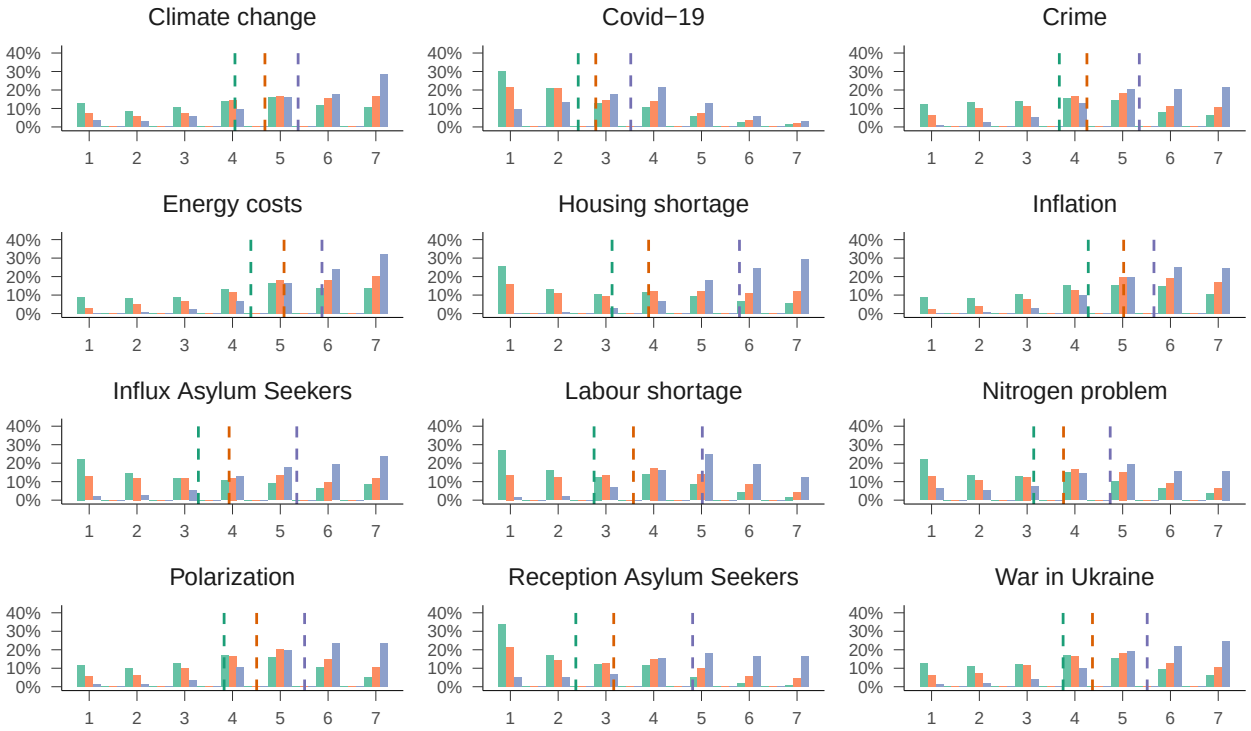
All analyses were performed using R (Team, 2023) and the base-R package. We start by examining the average levels of threat perception, worry, and issue salience. If the three measures capture the same construct, their distributions and mean scores should be highly similar. Figure 1 depicts the distributions of threat perception (green), worry (orange), and issue salience (blue) across the twelve societal issues. Dashed lines indicate mean responses for each measure per issue. To test the difference between the levels of threat perception, worry, and issue salience we conducted two-sided paired-sample t-tests with Bonferroni-Holm-corrected p-values to account for repeated testing for all pairwise comparisons. Table 1 in Appendix A provides descriptive statistics for threat perception, worry, and issue salience for all twelve issues. Table 2 in Appendix B provides the detailed results of all t-test comparisons.

Starting with threat perception and worry, the self-reported levels of threat perception are lower than the self-reported levels of worry for the twelve examined issues. These differences are statistically significant (all $p_{adj} < .001$). In our effect size interpretation, we follow Funder and

Ozer, 2019, and interpret effects of $d \approx .1$ as very small, $d \approx .2$ as small, $d \approx .41$ as medium, $d \approx .63$ as large, and $d > .87$ as very large. Following this logic, the differences between threat perception and worry range from small to medium effects: $d_{Covid\text{-}19} = .23$ to $d_{Housing\ shortage} = .48$. Turning to threat perception and issue salience, all twelve issues are statistically significantly less threatening than salient (all $p_{adj} < .001$). The differences between threat perception and issue salience are large to very large, ranging from $d_{Covid\text{-}19} = .68$ to $d_{Housing\ shortage} = 1.52$. All threat perception-issue salience differences are larger than any of the threat perception-worry differences. Finally, for worry and issue salience, all twelve issues are on average statistically significantly less worrying than salient (all $p_{adj} < .001$). The differences between worry and issue salience are around medium to very large, ranging from $d_{Climate\ change} = .39$ to $d_{Housing\ shortage} = 1.08$.

To conclude, Dutch citizens report issues to be slightly less threatening than worrying, and substantively less threatening or worrying than salient. This is a first indication that threat perception and worry measure a separate construct than issue salience does.

Figure 1: Distributions of Threat Perception, Worry, and Issue Salience Responses per Issue.



Note. Distributions of threat perception (blue), worry (orange), and issue salience responses (green) for each issue. Dashed lines represent mean responses. Across all issues, Bonferroni-Holm-corrected paired t-tests (two-sided) showed significant differences between threat perception, worry, and issue salience, across all 36 comparisons. Table 2 in Appendix B provides detailed t-test results.

Correlations between Threat Perception, Worry, and Issue Salience

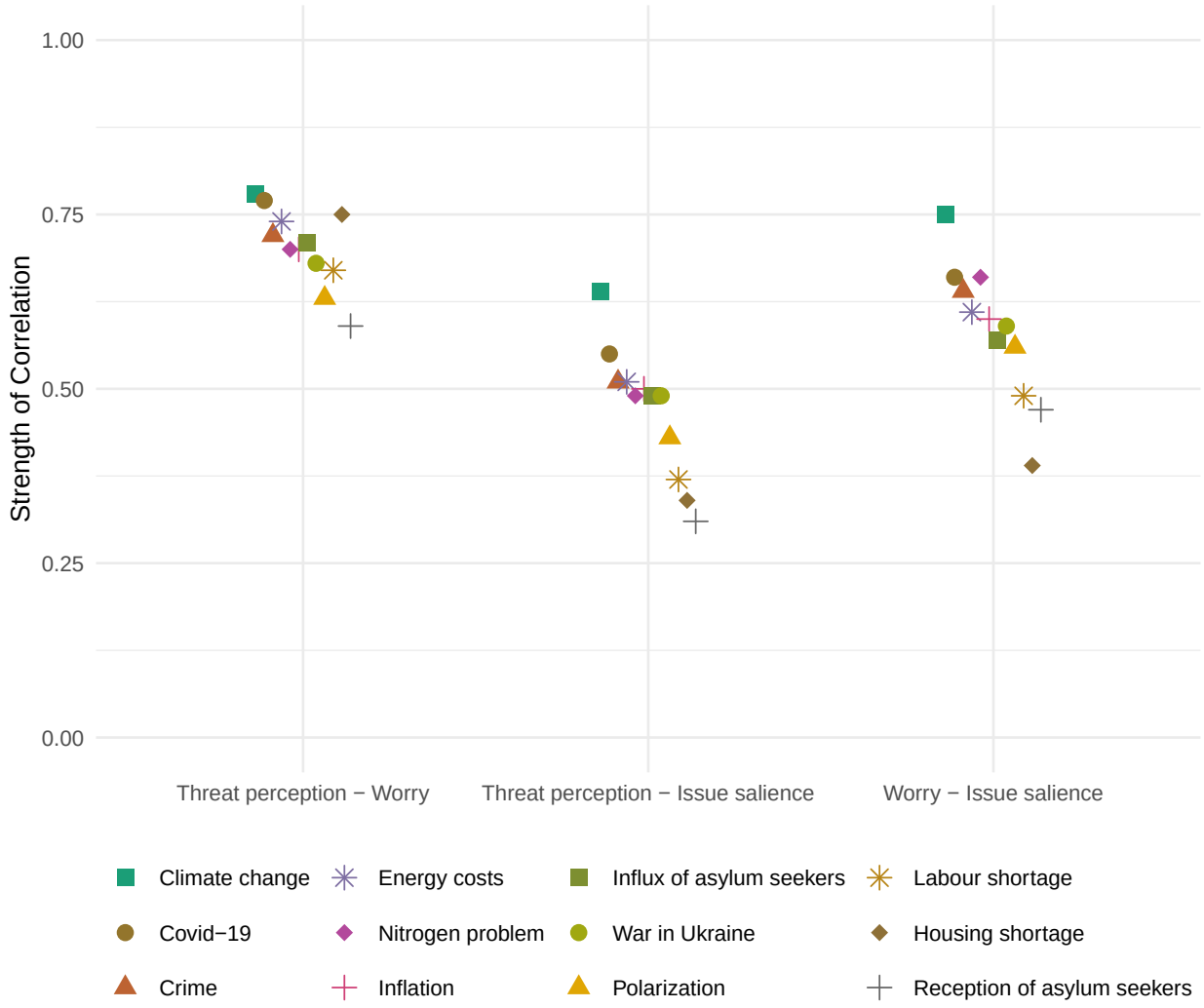
To further assess construct validity, we investigate the correlations between self-reported threat perception, worry, and salience. We follow Clark and Watson, 2016, and conclude that threat perception, worry, and issue salience are part of the same construct if we find strong positive correlations between the three measures of at least $r = .60$. Figure 2 plots the correlations between threat perception and worry (left), threat perception and issue salience (middle), and worry and issue salience (right) for the examined issues. To test whether there is a statistically significant difference in the correlation coefficients across issues, we first converted all correlation coefficients to z-scores using Fisher's transformation and then conducted z-tests with Bonferroni-Holm-corrected p-values to account for repeated testing. Table 3 in Appendix C provides full results of the correlation difference tests.

A visual inspection of the correlation coefficients plotted in Figure 2 shows that threat perception and worry are very strongly associated with each other (average $r_{Threat\ perception\text{-}Worry} = .70$), and fall within a small range from $r_{Reception\ of\ asylum\ seekers} = 0.59$ to $r_{Climate\ change} = 0.78$. All threat perception-worry correlation coefficients – apart from $r_{Reception\ of\ asylum\ seekers} = 0.59$ – are above our uni-dimensionality cutoff of $r = .60$. Considering threat perception and issue salience, the correlation coefficients are overall lower than the threat perception-worry correlations (average $r_{Threat\ perception\text{-}Issue\ salience} = .47$). There is one relatively strong correlation between threat perception and issue salience above our uni-dimensionality cutoff of $r = .60$, namely ($r_{Climate\ change} = 0.64$). All other threat perception-issue salience correlations are below our cut-off, with the lowest correlations for the reception of asylum seekers ($r_{Reception\ of\ asylum\ seekers} = .31$), the housing shortage ($r_{Housing\ shortage} = .34$), and the labour shortage ($r_{Labour\ shortage} = .37$). Similarly, the correlations between worry and issue salience are also overall lower than the threat perception-worry correlations (average $r_{Worry\text{-}Issue\ salience} = .58$), have a larger range (from $r_{Housing\ shortage} = 0.39$ to $r_{Climate\ change} = 0.75$), and only half of the coefficients are above our uni-dimensionality cutoff of $r = .60$.

Next, we conducted a more formal test of the construct validity by assessing whether within each issue, the correlations between threat perception and worry, threat perception and issue salience, and worry and issue salience differ statistically significantly from each other. Within each issue, the correlation between threat perception and worry is statistically significantly stronger than the correlations between a) threat perception and issue salience (all $p_{adj} < .001$), and b) worry and issue salience (all $p_{adj} < .05$), see Table 4 in Appendix C. The correlations between threat perception and issue salience are statistically significantly weaker than the correlations between worry and issue salience (all $p_{adj} < .05$, except $p_{adj\text{-}Housing\ Shortage} = .078$).

To summarize, our assessment of the construct validity of the three constructs demonstrates that self-reported threat perception and worry about societal issues are strongly associated with each other, as indicated by associations above our uni-dimensionality cutoff of $r = .60$. Issue salience, on the other hand, is more weakly associated with both threat perception and worry. We take this as further evidence that threat perception and worry measures grasp the same construct, while issue salience measures a separate construct.

Figure 2: Correlation Coefficients Between Threat Perception and Worry (Left), Threat Perception and Issue Salience (Middle), and Worry and Issue Salience (Right).



Note. Correlation coefficients are ordered by the issues' average correlation strength. The correlation coefficients for threat perception and worry, threat perception and issue salience, and worry and issue salience all differed statistically significantly from each other, with the exception of the housing shortage. Table 3 in Appendix C provides detailed correlation difference test results.

Associations Between Right-Wing Ideology and Measures of Threat Perception, Worry, and Salience

Moving to the predictive validity of threat perception measures, we investigated the correlations between right-wing political ideology and self-reported threat perception, worry, and issue salience. Figure 3 shows the correlation coefficients of right-wing ideology on a left-right spectrum (0 = left; 10 = right) with threat perception, worry, and salience, across twelve societal issues. Positive (resp.

negative) correlation coefficients indicate a positive (resp. negative) association between right-wing ideology and threat perception, worry, or issue salience.

Before discussing the predictive validity, we zoom in on the associations between threat perception and right-wing ideology. In line with state-of-the-art evidence in the threat-politics literature (e.g., Brandt & Bakker, 2022; Eadeh & Chang, 2020; Godefroidt et al., 2019), we see that different threat perceptions are, in terms of magnitude and direction, differently associated with right-wing ideology. Regarding their magnitude (Funder & Ozer, 2019), the associations between threat perception and right-wing ideology vary considerably from very small ($|r_{War\ in\ Ukraine}| = .001$) to very large ($|r_{Influx\ of\ asylum\ seekers}| = .41$). Five threat perceptions – crime, energy costs, inflation, the influx of asylum seekers, and the labour shortage – are positively and statistically significant associated with right-wing ideology. For instance, people who are threatened by crime also self-report a more right-wing ideology. At the same time, we find five negative and statistically significant associations between threat perceptions – climate change, Covid-19, the nitrogen problem, polarization, and the reception of asylum seekers – and right-wing ideology. People who are, for instance, threatened by climate change report a more left-wing ideology.

Next, we assess whether we reach similar conclusions on the relation to right-wing ideology when relying upon measures of threat perception, worry, or issue salience. To compare the examined threat perception-ideology relations to the worry-ideology and issue salience-ideology relations across the same societal issues, we conducted Fisher's z-tests with Bonferroni-Holm-corrected p-values to account for repeated testing. Figure 3 marks statistically significant differences from the baseline threat perception-ideology relation with solid (as opposed to hollow) circles. Table 5 in Appendix D provides results of the correlation coefficient difference tests.

We do not find evidence for a Type S (sign) error when relying interchangeably upon measures of threat perception, worry, or issue salience in relation to right-wing ideology. In other words: When there is a positive association with right-wing ideology for threat perception regarding an issue, we see almost always the same positive association with worry and issue salience. Out of 36 tests, there is one Type-S error: Perceiving the labour shortage as threatening is (statistically significantly) positively related to right-wing ideology, while perceiving it as important is negatively (but not statistically significantly) related to right-wing ideology.

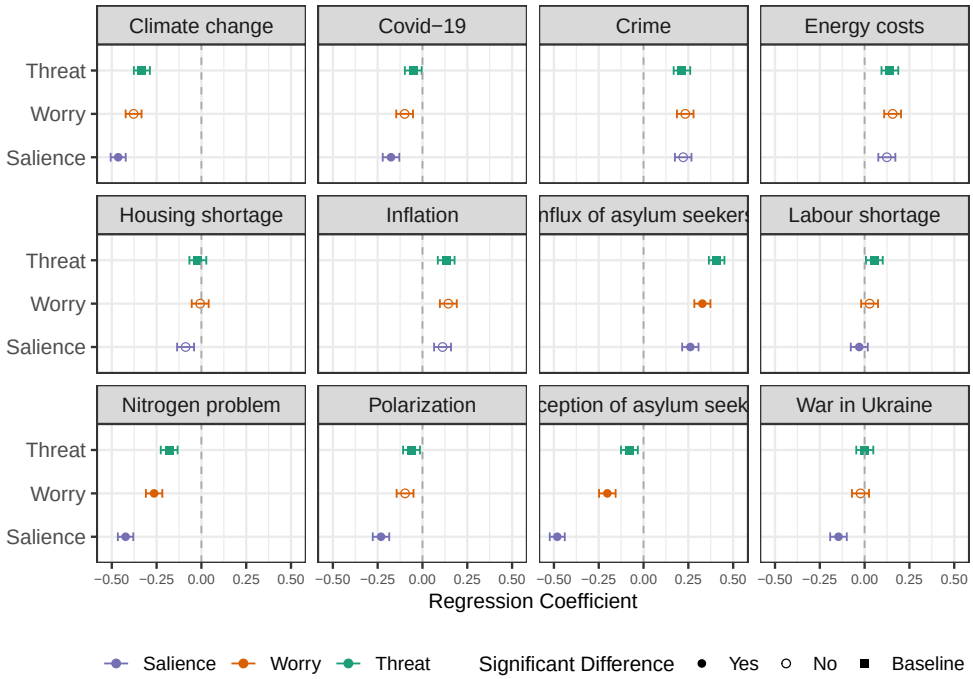
We now turn to the extent to which different measures lead to a Type M (magnitude) error, i.e., an error about the magnitude of their associations with right-wing ideology. Starting with threat perception and worry, we cannot reject the null-hypothesis of no-difference between the

threat perception and worry correlations with right-wing ideology for nine of the twelve issues. Also, as Figure 3 depicts, the correlations with right-wing ideology are highly similar for the threat perception and worry measures, with small differences ranging from $\Delta_{Reception\ of\ asylum\ seekers} = -.12$ to $\Delta_{Energy\ costs;\ Crime} = .02$. We see statistically significantly different correlations for only three of twelve issues: the influx of asylum seekers, the nitrogen problem, and the inhumane reception of asylum seekers.

Turning to issue salience, we find that issue salience is overall more strongly associated with right-wing ideology than threat perception is, with statistically significant correlation differences in eight of twelve examined issues (climate change, Covid-19, the housing shortage, the labour shortage, the nitrogen problem, polarization, the reception of asylum seekers, and the war in Ukraine). Only for the influx of asylum seekers, the threat perception measure is more positively associated with right-wing ideology than the issue salience measure is ($r_{Threat\ perception\text{-}Right\text{-}wing\ ideology} = .41$; ($r_{Issue\ salience\text{-}Right\text{-}wing\ ideology} = .26$). For the issues crime, energy costs, the housing shortage, and inflation, the associations of threat perception and issue salience with right-wing ideology are not statistically significantly different. Overall, issue salience is to a larger extent associated with right-wing ideology than threat perception is, with correlation differences ranging from $\Delta_{r\ Reception\ of\ asylum\ seekers} = -.40$ to $\Delta_{r\ Crime} = .01$.

To summarize, our assessment of the predictive validity shows that using the threat perception and the worry measure interchangeably in a study on ideology does not lead to different conclusions. The predictive validity of issue salience, however, is different – especially in terms of the magnitude of the derived effects. This is a timely issue, as psychologists are increasingly encouraged to look beyond statistical significance and carefully assess effect sizes (Lakens, 2022). Our consideration of not only direction and statistical significance, but also magnitude of differences shows that scholars should be careful using issue salience in a study on threat perception or worry (and vice versa).

Figure 3: Bivariate Correlations Between Right-Wing Ideology and Threat Perception, Worry, and Issue Salience



Note. Correlation coefficients of threat perception (green), worry (orange), and issue salience (blue) with right-wing ideology on a left-right spectrum (0 = left; 10 = right). Statistically significant correlation coefficient differences from the threat perception baseline (square) are indicated by solid circles; non-significant differences by hollow circles. Table 5 in Appendix D provides detailed correlation difference test results.

Discussion

Our study demonstrates that while threat perception and worry tap into the same underlying construct, they are distinct from issue salience. This indicates that citizens do not necessarily feel threatened by or worried about the issues they find most important, and vice versa. Regarding the predictive validity, our findings reveal that threat perception and worry are associated with political ideology in a similar direction and strength. Issue salience shows a distinct pattern with, across the board, stronger associations with ideology.

Going forward, future research may extend our findings to a wider range of measures related to threat perception, worry, and issue salience used in research, such as discontent, anxiety, and anger (e.g., Albertson & Gadarian, 2015; Kesberg et al., 2022; Niemi & Bartels, 1985). Further validation efforts may even include non-self-report measures, such as behavioural or psychophysiological

indicators of threat (e.g., Bakker et al., 2020; Johnston & Madson, 2022). Moreover, future work may deepen the construct validity of threat and worry by, for instance, exploring the appraisal dimensions that cause threat perception and worry (Scherer & Moors, 2019). Additionally, further in-depth investigations of predictive validity could operationalize ideology across separate dimensions (Brandt & Bakker, 2022; Malka et al., 2019). Finally, cross-cultural research is essential to assess the generalizability of our findings, as our study was conducted in the Netherlands.

In sum, by showing that threat perception and worry measure the same underlying construct, distinct from issue salience, we establish a stronger foundation for future research. Our findings validate decades of "threat-politics" research that treated threat perception and worry as interchangeable indicators of a common construct (e.g., Feldman & Stenner, 1997; Onraet et al., 2013; Van der Linden, 2015), while also highlighting the limitations of using issue salience as a proxy. By doing so, we contribute to the growing body of work on the validation of psychological measures (e.g., Bringmann et al., 2022; Fabrigar et al., 2020; Flake & Fried, 2020).

References

Albertson, B., & Gadarian, S. K. (2015, August 31). *Anxious politics: Democratic citizenship in a threatening world* [Google-Books-ID: lKCNCgAAQBAJ]. Cambridge University Press.

Azrout, R., Dubel, R., Jonkman, J., van Berlo, Z. M. C., & Wolfers, L. (2022, May 12). ASCoR 25-year collaborative survey. https://doi.org/https://doi.org/10.17605/OSF.IO/D958H

Bakker, B. N., Schumacher, G., Gothreau, C., & Arceneaux, K. (2020). Conservatives and liberals have similar physiological responses to threats. *Nature Human Behaviour*, *4*(6), 613–621. https://doi.org/10.1038/s41562-020-0823-z

Bélanger, É., & Meguid, B. M. (2008). Issue salience, issue ownership, and issue-based vote choice. *Electoral Studies*, *27*(3), 477–491. https://doi.org/10.1016/j.electstud.2008.01.001

Brandt, M. J., & Bakker, B. N. (2022). The complicated but solvable threat–politics relationship. *Trends in Cognitive Sciences*, *26*(5), 368–370. https://doi.org/10.1016/j.tics.2022.02.005

Brandt, M. J., Turner-Zwinkels, F. M., Karapirinler, B., Van Leeuwen, F., Bender, M., Van Osch, Y., & Adams, B. (2021). The association between threat and politics depends on the type of threat, the political domain, and the country. *Personality and Social Psychology Bulletin*, *47*(2), 324–343. https://doi.org/10.1177/0146167220946187

Bringmann, L. F., Elmer, T., & Eronen, M. I. (2022). Back to basics: The importance of conceptual clarification in psychological science. *Current Directions in Psychological Science*, *31*(4), 340–346. https://doi.org/10.1177/09637214221096485

Centraal Bureau voor de Statistiek. (n.d.). *Age distribution*. Retrieved January 10, 2025, from https://www.cbs.nl/en-gb/visualisations/dashboard-population/age/age-distribution

Centraal Bureau voor de Statistiek. (2024, September). *The netherlands in numbers*. Centraal Bureau voor de Statistiek. Retrieved January 10, 2025, from https://longreads.cbs.nl/the-netherlands-in-numbers-2024/what-is-the-level-of-education-in-the-netherlands/#:~:text=In%202023%2C%20among%20those%20aged,as%20their%20highest%20educational%20qualification.

Ciuk, D. J., & Yost, B. A. (2016). The effects of issue salience, elite influence, and policy content on public opinion [Publisher: Routledge _eprint: https://doi.org/10.1080/10584609.2015.1017629]. *Political Communication*, *33*(2), 328–345. https://doi.org/10.1080/10584609.2015.1017629

Clark, L. A., & Watson, D. (2016). Constructing validity: Basic issues in objective scale development. In A. E. Kazdin (Ed.), *Methodological issues and strategies in clinical research (4th*

ed.). (pp. 187–203). American Psychological Association. https://doi.org/10.1037/14805-012

Conway Iii, L. G., Zubrod, A., Chan, L., McFarland, J. D., & Van De Vliert, E. (2023). Is the myth of left-wing authoritarianism itself a myth? *Frontiers in Psychology*, *13*, 1041391. https://doi.org/10.3389/fpsyg.2022.1041391

Crawford, J. T. (2017). Are conservatives more sensitive to threat than liberals? it depends on how we define threat and conservatism. *Social Cognition*, *35*(4), 354–373. https://doi.org/10.1521/soco.2017.35.4.354

Dias, N., & Lelkes, Y. (2022). The nature of affective polarization: Disentangling policy disagreement from partisan identity [_eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/ajps.12628]. *American Journal of Political Science*, *66*(3), 775–790. https://doi.org/10.1111/ajps.12628

Eadeh, F. R., & Chang, K. K. (2020). Can threat increase support for liberalism? new insights into the relationship between threat and political attitudes. *Social Psychological and Personality Science*, *11*(1), 88–96. https://doi.org/10.1177/1948550618815919

Fabrigar, L. R., Wegener, D. T., & Petty, R. E. (2020). A validity-based framework for understanding replication in psychology. *Personality and Social Psychology Review*, *24*(4), 316–344. https://doi.org/10.1177/1088868320931366

Feldman, S., & Stenner, K. (1997). Perceived threat and authoritarianism. *Political Psychology*, *18*(4), 741–770. https://doi.org/10.1111/0162-895X.00077

Flake, J. K., Davidson, I. J., Wong, O., & Pek, J. (2022). Construct validity and the validity of replication studies: A systematic review. *American Psychologist*, *77*(4), 576–588. https://doi.org/10.1037/amp0001006

Flake, J. K., & Fried, E. I. (2020). Measurement schmeasurement: Questionable measurement practices and how to avoid them. *Advances in Methods and Practices in Psychological Science*, *3*(4), 456–465. https://doi.org/10.1177/2515245920952393

Funder, D. C., & Ozer, D. J. (2019). Evaluating effect size in psychological research: Sense and nonsense. *Advances in Methods and Practices in Psychological Science*, *2*(2), 156–168. https://doi.org/10.1177/2515245919847202

Gelman, A., & Carlin, J. (2014). Beyond power calculations: Assessing type s (sign) and type m (magnitude) errors. *Perspectives on Psychological Science*, *9*(6), 641–651. https://doi.org/10.1177/1745691614551642

Godefroidt, A., Eadeh, F. R., & Adam-Trojan, J. (2019). Threat ownership theory (TOT): Towards a greater understanding of the dynamic link between threat and political attitudes. https://www.mzes.uni-mannheim.de/openscience/wp-content/uploads/2019/01/Godefroidt-Eadeh-Adam-Trojan-OSSC2019-Threat-Ownership-Theory-PAP.pdf

Hetherington, M., & Suhay, E. (2011). Authoritarianism, threat, and americans' support for the war on terror: AUTHORITARIANISM, THREAT, AND THE WAR ON TERROR. *American Journal of Political Science*, *55*(3), 546–560. https://doi.org/10.1111/j.1540-5907.2011.00514.x

Hornsey, M. J., & Pearson, S. (2024). Perceptions of climate change threat across 121 nations: The role of individual and national wealth. *Journal of Environmental Psychology*, *96*, 102338. https://doi.org/10.1016/j.jenvp.2024.102338

Huber, J. D. (1989). Values and partisanship in left-right orientations: Measuring ideology [_eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1475-6765.1989.tb00209.x]. *European Journal of Political Research*, *17*(5), 599–621. https://doi.org/10.1111/j.1475-6765.1989.tb00209.x

Johnston, C. D., & Madson, G. J. (2022). Negativity bias, personality and political ideology. *Nature Human Behaviour*, *6*(5), 666–676. https://doi.org/10.1038/s41562-022-01327-5

Jost, J. T. (2017). Ideological asymmetries and the essence of political psychology. *Political Psychology*, *38*(2), 167–208. https://doi.org/10.1111/pops.12407

Kahn, D. T., Björklund, F., & Hirschberger, G. (2022). The intent and extent of collective threats: A data-driven conceptualization of collective threats and their relation to political preferences. *Journal of Experimental Psychology: General*, *151*(5), 1178–1198. https://doi.org/10.1037/xge0000868

Kesberg, R., Kuppens, T., Turner-Zwinkels, F. M., Van Noord, J., Spruyt, B., & Brandt, M. J. (2022). Threat networks patterns of interconnections between psychological threats and their associations with sociodemographics and political behaviors. https://psyarxiv.com/b8d42/download?format=pdf

Krosnick, J. A. (1990). Government policy and citizen passion: A study of issue publics in contemporary america [Publisher: Springer]. *Political Behavior*, *12*(1), 59–92. Retrieved January 10, 2025, from https://www.jstor.org/stable/586285

Lakens, D. (2022). Sample size justification (D. V. Ravenzwaaij, Ed.). *Collabra: Psychology*, *8*(1), 33267. https://doi.org/10.1525/collabra.33267

Lavine, H., Sullivan, J. L., Borgida, E., & Thomsen, C. J. (1996). The relationship of national and personal issue salience to attitude accessibility on foreign and domestic policy issues [Publisher: [International Society of Political Psychology, Wiley]]. *Political Psychology*, *17*(2), 293–316. https://doi.org/10.2307/3791812

Leeper, T. J., & Robison, J. (2020). More important, but for what exactly? the insignificant role of subjective issue importance in vote decisions. *Political Behavior*, *42*(1), 239–259. https://doi.org/10.1007/s11109-018-9494-0

Malka, A., Lelkes, Y., & Soto, C. J. (2019). Are cultural and economic conservatism positively correlated? a large-scale cross-national test. *British Journal of Political Science*, *49*(3), 1045–1069. https://doi.org/10.1017/S0007123417000072

Niemi, R. G., & Bartels, L. M. (1985). New measures of issue salience: An evaluation [Publisher: The University of Chicago Press]. *The Journal of Politics*, *47*(4), 1212–1220. https://doi.org/10.2307/2130815

Onraet, E., Van Hiel, A., Dhont, K., & Pattyn, S. (2013). Internal and external threat in relationship with right-wing attitudes. *Journal of Personality*, *81*(3), 233–248. https://doi.org/10.1111/jopy.12011

Pew Research Center. (2020, September). *Despite pandemic, many europeans still see climate change as greatest threat to their countries*. https://pewresearch.org/global/wp-content/uploads/sites/2/2020/09/PG_2020.09.09_global-threats_FINAL.pdf

RePass, D. E. (1971). Issue salience and party choice [Publisher: [American Political Science Association, Cambridge University Press]]. *The American Political Science Review*, *65*(2), 389–400. https://doi.org/10.2307/1954456

Scherer, K. R., & Moors, A. (2019). The emotion process: Event appraisal and component differentiation [Publisher: Annual Reviews]. *Annual Review of Psychology*, *70*, 719–745. https://doi.org/10.1146/annurev-psych-122216-011854

Schlipphak, B. (2024). Threat perceptions, blame attribution, and political trust. *Journal of Elections, Public Opinion and Parties*, *34*(1), 59–78. https://doi.org/10.1080/17457289.2021.2001474

Smith, B. A., & Kim, H. (2024). Effects of threat sensitivity and issue concern on candidate preference. *Journal of Elections, Public Opinion and Parties*, 1–21. https://doi.org/10.1080/17457289.2024.2395352

Stevens, D., & Vaughan-Williams, N. (2016). Citizens and security threats: Issues, perceptions and consequences beyond the national frame. *British Journal of Political Science*, *46*(1), 149–175. https://doi.org/10.1017/S0007123414000143

Team, R. C. (2023). *R: A language and environment for statistical computing*. Vienna, Austria, R Foundation for Statistical Computing. https://www.R-project.org/

Van der Linden, S. (2015). The social-psychological determinants of climate change risk perceptions: Towards a comprehensive model. *Journal of Environmental Psychology*, *41*, 112–124. https://doi.org/10.1016/j.jenvp.2014.11.012

Willis-Esqueda, C., Delgado, R. H., & Pedroza, K. (2017). Patriotism and the impact on perceived threat and immigration attitudes. *The Journal of Social Psychology*, *157*(1), 114–125. https://doi.org/10.1080/00224545.2016.1184125

Wong, N. C. H., & Cappella, J. N. (2009). Antismoking threat and efficacy appeals: Effects on smoking cessation intentions for smokers with low and high readiness to quit. *Journal of Applied Communication Research*, *37*(1), 1–20. https://doi.org/10.1080/00909880802593928

Woods, J. (2011). Framing terror: An experimental framing effects study of the perceived threat of terrorism. *Critical Studies on Terrorism*, *4*(2), 199–217. https://doi.org/10.1080/17539153.2011.586205

A Appendix

Descriptive Statistics of Threat Perception, Worry, and Issue Salience

Table 1 provides mean and standard deviations for threat perception, worry, and issue salience for all twelve issues.

Table 1: Means and Standard Deviations of Threat Perception, Worry, and Issue Salience per Issue.

	Threat Perception		Worry		Issue Salience	
Issue	M	SD	M	SD	M	SD
Covid-19	2.42	1.49	2.79	1.57	3.52	1.56
Influx of asylum seekers	3.29	2.02	3.93	1.99	5.35	1.51
Reception of asylum seekers	2.37	1.50	3.16	1.82	4.81	1.74
Inflation	4.28	1.85	5.02	1.59	5.65	1.22
Energy costs	4.38	1.91	5.08	1.67	5.87	1.19
War in Ukraine	3.75	1.81	4.37	1.74	5.51	1.40
Nitrogen problem	3.14	1.80	3.76	1.81	4.74	1.77
Climate change	4.05	1.94	4.68	1.85	5.37	1.68
Housing shortage	3.13	1.96	3.89	2.07	5.79	1.22
Polarization	3.82	1.77	4.51	1.68	5.51	1.36
Labour shortage	2.75	1.66	3.58	1.76	5.02	1.37
Crime	3.67	1.81	4.25	1.76	5.35	1.40

B Appendix

T-Test Comparisons of Threat Perception, Worry, and Issue Salience

Table 2 provides the results of the Bonferroni-Holm corrected two-sided paired sample t-test comparisons for a) threat perception and worry, b) threat perception and issue salience, and c) worry and issue salience across twelve societal issues.

Table 2: T-test Results for Threat Perception, Worry, and Issue Salience Across Twelve Societal Issues

Issue	Δ_{Mean} [1]	t	p_{adj}	CI_{low}	CI_{up}	d
Threat Perception vs. Worry						
Climate change	-0.63	-21.58	<.001	-0.68	-0.57	-0.33
Covid-19	-0.37	-15.08	<.001	-0.41	-0.32	-0.24
Crime	-0.58	-18.70	<.001	-0.64	-0.52	-0.32
Energy costs	-0.69	-23.07	<.001	-0.75	-0.64	-0.38
Housing shortage	-0.77	-22.89	<.001	-0.83	-0.70	-0.38
Inflation	-0.74	-23.77	<.001	-0.80	-0.68	-0.42
Influx of asylum seekers	-0.64	-18.19	<.001	-0.71	-0.57	-0.32
Labour shortage	-0.82	-25.51	<.001	-0.89	-0.76	-0.48
Nitrogen problem	-0.62	-19.33	<.001	-0.69	-0.56	-0.35
Polarization	-0.68	-19.82	<.001	-0.75	-0.61	-0.39
Reception of asylum seekers	-0.79	-22.34	<.001	-0.86	-0.72	-0.47
War in Ukraine	-0.61	-18.77	<.001	-0.68	-0.55	-0.35
Threat Perception vs. Issue Salience						
Climate change	-1.32	-36.82	<.001	-1.39	-1.25	-0.72
Covid-19	-1.10	-32.82	<.001	-1.16	-1.03	-0.72
Crime	-1.67	-44.55	<.001	-1.75	-1.60	-1.02
Energy costs	-1.49	-38.64	<.001	-1.56	-1.41	-0.89
Housing shortage	-2.67	-59.86	<.001	-2.75	-2.58	-1.59
Inflation	-1.37	-36.40	<.001	-1.45	-1.30	-0.84
Influx of asylum seekers	-2.06	-48.43	<.001	-2.14	-1.98	-1.13
Labour shortage	-2.27	-56.94	<.001	-2.34	-2.19	-1.48
Nitrogen problem	-1.60	-38.50	<.001	-1.68	-1.52	-0.90
Polarization	-1.68	-42.62	<.001	-1.76	-1.61	-1.06
Reception of asylum seekers	-2.44	-55.10	<.001	-2.53	-2.36	-1.50
War in Ukraine	-1.76	-45.63	<.001	-1.84	-1.68	-1.07
Worry vs. Issue Salience						
Climate change	-0.69	-24.05	<.001	-0.75	-0.64	-0.39
Covid-19	-0.73	-24.41	<.001	-0.79	-0.67	-0.47
Crime	-1.10	-34.56	<.001	-1.16	-1.03	-0.68
Energy costs	-0.79	-25.54	<.001	-0.85	-0.73	-0.52
Housing shortage	-1.90	-41.88	<.001	-1.99	-1.81	-1.08
Inflation	-0.63	-21.20	<.001	-0.69	-0.58	-0.44
Influx of asylum seekers	-1.42	-36.21	<.001	-1.49	-1.34	-0.78
Labour shortage	-1.44	-38.45	<.001	-1.52	-1.37	-0.90
Nitrogen problem	-0.98	-28.34	<.001	-1.04	-0.91	-0.54
Polarization	-1.00	-29.89	<.001	-1.07	-0.94	-0.65
Reception of asylum seekers	-1.65	-38.98	<.001	-1.73	-1.57	-0.93
War in Ukraine	-1.15	-34.06	<.001	-1.21	-1.08	-0.71

Note:
Results of 36 two-sided paired t-tests with Bonferroni-Holm corrected p-values to correct for multiple comparisons. All tests were performed with df = 1862.

[1] Δ_{Mean} indicates mean difference.

C Appendix

Correlations Between Threat Perception, Worry, and Issue Salience

Table 3 provides the correlation coefficients of the threat perception, worry, and issue salience measures with each other for the twelve examined societal issues.

Table 4 provides the results of Bonferroni-Holm-corrected Fisher's z-Tests for statistically significant differences between the correlations of threat perception, worry, and issue salience with each other.

Table 3: Bivariate Inter-Measure Correlation Coefficients for Threat Perception, Worry, and Issue Salience Across Twelve Societal Issues

Issue	$r_{\text{Threat Perception - Worry}}$	$r_{\text{Threat Perception - Issue Salience}}$	$r_{\text{Worry - Issue Salience}}$
Climate change	0.78	0.64	0.75
Covid-19	0.77	0.55	0.66
Crime	0.72	0.51	0.64
Energy costs	0.74	0.51	0.61
Housing shortage	0.75	0.34	0.39
Inflation	0.70	0.50	0.60
Influx of asylum seekers	0.71	0.49	0.57
Labour shortage	0.67	0.37	0.49
Nitrogen problem	0.70	0.49	0.66
Polarization	0.63	0.43	0.56
Reception of asylum seekers	0.59	0.31	0.47
War in Ukraine	0.68	0.49	0.59

Note:
Bivariate Pearson correlation coefficients for the associations between threat perception and worry (left), threat perception and issue salience (middle), and worry and issue salience (right) across twelve societal issues.

Table 4: Fisher's Z-Test Results for Correlation Coefficients Between Threat Perception, Worry, and Issue Salience Across Twelve Societal Issues

	$r_{\text{Threat Perception - Issue Salience}}$ vs. $r_{\text{Threat Perception - Worry}}$		$r_{\text{Worry - Issue Salience}}$ vs. $r_{\text{Threat Perception - Issue Salience}}$		$r_{\text{Worry - Issue Salience}}$ vs. $r_{\text{Threat Perception - Worry}}$	
Issue	z	p	z	p	z	p
Climate change	-8.76	$< .001$	6.55	$< .001$	-2.21	.027
Covid-19	-12.26	$< .001$	5.32	$< .001$	-6.94	$< .001$
Crime	-10.52	$< .001$	5.96	$< .001$	-4.56	$< .001$
Energy costs	-11.82	$< .001$	4.46	$< .001$	-7.37	$< .001$
Housing shortage	-18.87	$< .001$	1.76	.078	-17.11	$< .001$
Inflation	-9.70	$< .001$	4.39	$< .001$	-5.31	$< .001$
Influx of asylum seekers	-10.71	$< .001$	3.40	.001	-7.31	$< .001$
Labour shortage	-12.88	$< .001$	4.50	$< .001$	-8.38	$< .001$
Nitrogen problem	-10.10	$< .001$	7.83	$< .001$	-2.27	.023
Polarization	-8.59	$< .001$	5.27	$< .001$	-3.31	.001
Reception of asylum seekers	-10.89	$< .001$	5.78	$< .001$	-5.11	$< .001$
War in Ukraine	-8.94	$< .001$	4.32	$< .001$	-4.62	$< .001$

Note:
Results of Fisher's z-tests comparing correlation coefficients of a) threat perception and issue salience vs. threat perception and worry (left), b) worry and issue salience vs. threat perception and issue salience (middle), and c) worry and issue salience vs. threat perception and worry (right) across twelve societal issues. All p-values were Bonferroni-Holm corrected for the 36 performed comparisons.

D Appendix

Correlations of Threat Perception, Worry, and Issue Salience with Right-Wing Ideology

Table 5 provides the correlation coefficients of threat perception, worry, and issue salience measures with right-wing ideology for the twelve examined societal issues.

Table provides the results of the Fisher's z-tests for statistically significant differences between the correlations with right-wing ideology for threat perception and worry, and for threat perception and issue salience.

Table 5: Coefficients and Fisher's Z-Test Results for Bivariate Correlations of Threat perception, Worry, and Issue Salience with Right-Wing Ideology Across Twelve Issues

	Correlation with Right-Wing Ideology				Correlation Difference from $r_{\text{Threat Perception - Right-Wing Ideology}}$		
Issue	$r_{\text{Right-Wing Ideology}}$	p_{r}	CI_{low}	CI_{up}	Δ_{r} [1]	z	p_{adj}
Threat Perception							
Climate change	-0.33	< .001	-0.38	-0.29			
Covid-19	-0.05	.032	-0.10	0.00			
Crime	0.21	< .001	0.17	0.26			
Energy costs	0.14	< .001	0.09	0.19			
Housing shortage	-0.02	.410	-0.07	0.03			
Inflation	0.13	< .001	0.09	0.18			
Influx of asylum seekers	0.41	< .001	0.36	0.45			
Labour shortage	0.05	.023	0.01	0.10			
Nitrogen problem	-0.18	< .001	-0.23	-0.13			
Polarization	-0.06	.011	-0.11	-0.01			
Reception of asylum seekers	-0.08	.001	-0.13	-0.03			
War in Ukraine	0.00	.971	-0.05	0.05			
Worry							
Climate change	-0.38	< .001	-0.42	-0.33	-0.05	-1.43	.260
Covid-19	-0.10	< .001	-0.15	-0.05	-0.05	-1.43	.260
Crime	0.23	< .001	0.19	0.28	0.02	0.55	.736
Energy costs	0.16	< .001	0.11	0.20	0.02	0.45	.745
Housing shortage	-0.01	.778	-0.05	0.04	0.01	0.38	.754
Inflation	0.14	< .001	0.10	0.19	0.01	0.36	.754
Influx of asylum seekers	0.33	< .001	0.28	0.37	-0.08	-2.5	.029
Labour shortage	0.03	.247	-0.02	0.07	-0.03	-0.79	.648
Nitrogen problem	-0.26	< .001	-0.31	-0.22	-0.08	-2.51	.029
Polarization	-0.10	< .001	-0.14	-0.05	-0.04	-1.06	.462
Reception of asylum seekers	-0.20	< .001	-0.25	-0.16	-0.12	-3.67	< .001
War in Ukraine	-0.02	.346	-0.07	0.02	-0.02	-0.69	.689
Issue Salience							
Climate change	-0.46	< .001	-0.51	-0.42	-0.13	-4.21	< .001
Covid-19	-0.18	< .001	-0.22	-0.13	-0.12	-3.69	< .001
Crime	0.22	< .001	0.17	0.27	0.01	0.21	.836
Energy costs	0.12	< .001	0.08	0.17	-0.02	-0.5	.743
Housing shortage	-0.09	< .001	-0.14	-0.04	-0.07	-2.01	.090
Inflation	0.11	< .001	0.06	0.16	-0.02	-0.6	.735
Influx of asylum seekers	0.26	< .001	0.22	0.31	-0.15	-4.58	< .001
Labour shortage	-0.03	.216	-0.08	0.02	-0.08	-2.48	.029
Nitrogen problem	-0.42	< .001	-0.47	-0.38	-0.24	-7.49	< .001
Polarization	-0.23	< .001	-0.28	-0.19	-0.17	-5.08	< .001
Reception of asylum seekers	-0.48	< .001	-0.52	-0.44	-0.4	-12.57	< .001
War in Ukraine	-0.15	< .001	-0.19	-0.10	-0.15	-4.34	< .001

Note:
Bivariate correlations of threat perception, worry, and issue salience with right-wing ideology across twelve societal issues (left), and Bonferroni-Holm corrected Fisher's z-test results comparing threat perception-right wing ideology correlations with worry- and issue salience-right wing ideology correlations (right) across twelve societal issues.

[1] Δ_{r} indicates correlation coefficient difference.