Perceptions of Global Crises:

Understanding Public Views and Engagement Across Countries

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Abstract

This study aims to investigate how people perceive global crises, such as climate change, pandemics, wars, and violence (e.g., their severity, urgency, and importance), and examines their motivation to engage in behaviors aimed at mitigating these crises or their effects across cultural contexts. Using Motivational Readiness Theory, we explore the roles of perceived importance (Want) and efficacy beliefs (Expectancy) in fostering action. Data will be collected from over 60 countries, representing ten cultural clusters, with a targeted sample size of 30,000 participants. The study aims to (1) investigate perceptions and motivations across diverse contexts, (2) map perception-reality gaps by comparing subjective crisis perceptions to objective indicators, (3) analyze how cultural dimensions (e.g., individualism-collectivism, media environments) shape these gaps, and (4) test hypotheses about cross-cultural variations in the Want/Expectancy-action relationship. Findings will guide culturally tailored policy strategies, offering open-access data and recommendations to enhance public engagement and address global crises effectively.

Introduction

Global crises such as climate change, pandemics, and political instability represent profound disruptions that destabilize the political and social systems and demand urgent adaptive responses (Byrne & Callaghan, 2022; Lidskog et al., 2022; Zabaniotou, 2020; Wallis et al., 2022; Voss & Lorenz, 2016; Pauchant & Mitroff, 1990). Recent crises have illustrated the devastating human and economic toll of these disruptions. For example, the COVID-19 pandemic caused millions of deaths, overwhelmed healthcare systems, and triggered widespread economic and social disruptions. The Ukraine-Russia conflict has led to humanitarian crises, mass displacement, and economic shocks in energy and food systems, while climate change has intensified natural disasters, rising sea levels, and biodiversity loss. Other crises, such as forced migration from regions like Syria and Venezuela or the rise of authoritarianism, threaten global stability by straining resources, fostering inequality, and undermining democratic institutions. Meanwhile, growing cybersecurity threats pose significant risks to national security and economic resilience.

While these crises often call for government-led interventions, their success depends on coordinated efforts involving individuals. Whether it is adopting sustainable behaviors to combat climate change or supporting policies for addressing social inequality, public engagement is crucial. However, the motivations driving this engagement remain insufficiently understood, particularly across different cultural and socioeconomic contexts.

This study applies the **Motivational Readiness Theory** (MRT, Kruglanski et al., 2014; see also Kossowska, 2024) to address this gap. By examining how perceptions of crises influence motivational readiness, we aim to uncover the psychological drivers of public engagement and provide actionable insights for fostering collective responses to global challenges.

Theoretical Framework: Motivational Readiness Theory

Motivational Readiness Theory (MRT) provides a robust framework for understanding why individuals engage—or fail to engage—in actions during crises (as we argued in Kossowska et al., 2024). MRT emphasizes two critical components:

1. **Want**: The extent to which individuals perceive a crisis as important and feel a strong desire to address it. This reflects the perceived urgency or severity of the crisis, such as the visible impacts of climate change or the humanitarian toll of conflict.

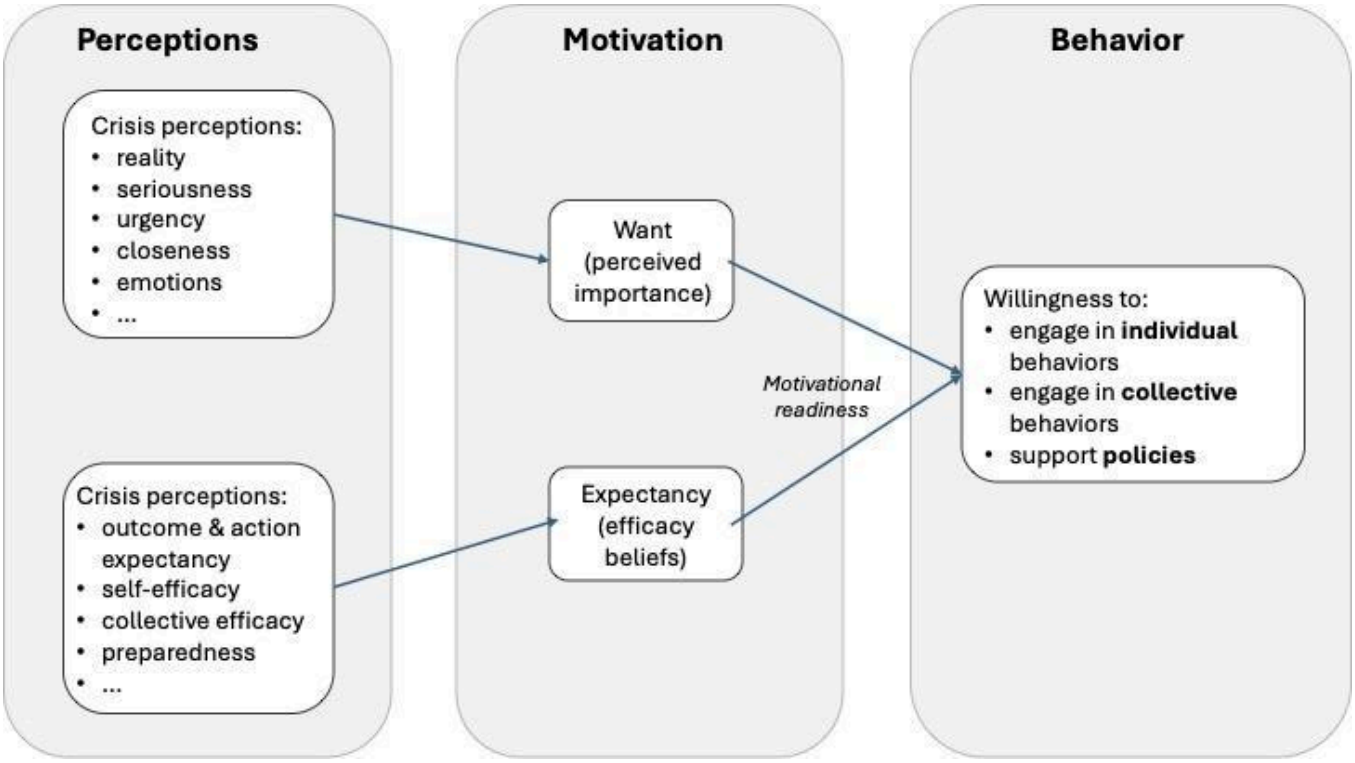
2. **Expectancy**: The belief in the feasibility of mitigating the crisis. This includes personal efficacy (confidence in one's ability to contribute meaningfully) and collective efficacy (confidence in governments, communities, or organizations to address the issue effectively).

MRT posits that both high Want and Expectancy are essential for motivating action. Conversely, low levels of either component can suppress engagement, even when the urgency of a crisis is recognized. For example, Kossowska et al. (2024) highlight how uncertainty about how to contribute or skepticism regarding the effectiveness of individual efforts can prevent action. Even when a strong desire to help exists, barriers such as lack of trust in institutions or insufficient resources can further suppress engagement.

By integrating these psychological dimensions into a cohesive model (see Figure 1), MRT provides a powerful tool for analyzing crisis engagement. Understanding why individuals fail to act—whether due to low perceived importance or low attainability—enables the design of targeted interventions to foster engagement. In crises, where public support is often critical to mitigation efforts, identifying and addressing these motivational barriers is vital.

Applying MRT to crisis engagement offers a valuable lens for uncovering and addressing psychological barriers to action. This study seeks to test whether these motivational mechanisms are consistent across different regions and types of crises or shaped by specific contextual factors. The findings will inform strategies to enhance public engagement, enabling tailored interventions that build resilience and foster action.

Figure 1: *Conceptual Model of Motivational Readiness in Crisis Engagement*



Project Aims and Expected Outcomes

This study aims to advance understanding of public perceptions and motivations in addressing global crises by pursuing the following objectives:

1. **Perceptions of Crises**: Assess individuals' perceptions of global crises, including their reality, severity, urgency, and personal closeness. Understanding these perceptions is critical for identifying psychological and contextual drivers of engagement.

2. **Mapping Perceptions to Objective Threats**: Investigate the alignment between subjective perceptions of crises and objective threat indicators (e.g., Climate Vulnerability Index, GINI Index, Political Stability Index, Global Food Security Index, Migration Index) to uncover perception-reality gaps (see Supplementary Materials for the complete list of indices). These gaps can reveal where public awareness diverges from actual risks, offering valuable insights to address misinformation and design more effective policy communication strategies. We will also analyze whether these gaps relate to media indices such as Media Independence and Media Bias, which capture the influence of informational environments on public perceptions. By identifying these discrepancies, the analysis will inform targeted public awareness campaigns and support efforts to bridge knowledge divides, fostering better-informed and more engaged communities.

3. **Motivational Readiness and Action Patterns**: Explore how crisis perceptions influence motivational readiness, focusing on the Want (importance) and Expectancy (efficacy) components of Motivational Readiness Theory (MRT). Additionally, examine the actions individuals take in response to crises, including individual behaviors, collective efforts, and policy support.

4. **Cross-Cultural Comparisons**: This study applies Motivational Readiness Theory (MRT) to examine cross-cultural variations in perceptions and motivational readiness to engage with crises. Drawing on ten cultural clusters (e.g., Anglo, Confucian Asia, Sub-Saharan Africa), we hypothesize that differences in geographical location, cultural values, governance structures, and economic conditions **shape the Want** (importance) and **Expectancy** (efficacy) components of motivational readiness. For instance, in collectivist societies (e.g., Confucian Asia, Sub-Saharan Africa), we predict a stronger sense of collective responsibility for crises, leading to higher perceived importance (Want) for societal actions. In contrast, individualistic cultures (e.g., Anglo, Germanic Europe) might emphasize personal responsibility (see more hypotheses in the **Research Questions & Hypotheses** section).

   We will also assess whether the mechanisms driving motivational readiness and actions remain consistent across different regions and types of crises, providing critical insights into the **universality or contextual specificity** of these processes. While we anticipate that the core mechanisms of Want (perceived importance) and Expectancy (efficacy beliefs) are universally applicable, the factors contributing to insufficient Want or Expectancy are likely to vary across contexts. For instance, high Want coupled with low Expectancy may universally suppress engagement, yet the underlying triggers for these states could differ—for example, political instability and lack of institutional trust in one region versus economic constraints and resource scarcity in another. Also, while the mechanisms may be universal, the strength of the relationships between Want, Expectancy, and willingness to act may vary depending on cultural context (see more hypotheses in the Research Questions & Hypotheses section).

Significance and Policy Implications

This project addresses global crises identified as priorities in the United Nations' Sustainable Development Goals (SDGs), which reflect the scientific consensus on the most urgent challenges humanity faces. These crises include climate change, social inequality, food insecurity, violent conflicts, forced migration, global pandemics, political instability, and cybersecurity threats. Table 1 illustrates the mapping of each crisis to the relevant SDG(s), highlighting their critical importance to global policy priorities.

Table1. *Mapping of Global Crises to Relevant Sustainable Development Goals (SDGs)*

Crisis	SDG Number	SDG Name	SDG Short Description
Climate Change and Environmental Degradation	13, 14, 15	Climate Action; Life Below Water; Life on Land	Combat climate change, protect ecosystems
Social Inequality	10, 5	Reduced Inequalities; Gender Equality	Reduce inequalities, achieve gender equality
Food Insecurity	2	Zero Hunger	End hunger, achieve food security, promote sustainable agriculture
Wars and Violent Conflicts	16	Peace, Justice, and Strong Institutions	Promote peaceful, inclusive societies, access to justice
Forced Migration and Refugees	10, 16	Reduced Inequalities; Peace, Justice, and Strong Institutions	Reduce inequalities, promote peace and justice
Global Pandemics	3	Good Health and Well-being	Ensure healthy lives and well-being for all
Rise of Authoritarianism and Political Instability	16	Peace, Justice, and Strong Institutions	Promote peaceful, inclusive societies, access to justice
Cybersecurity Threats	9	Industry, Innovation, and Infrastructure	Build resilient infrastructure, foster innovation

Mitigating these crises is a priority for policymakers, governments, and international organizations, as reflected in the SDGs and supported by scientific consensus (e.g., IPCC, 2021; Ripple et al., 2022; WHO, 2020). This project contributes to these efforts by investigating the psychological underpinnings of public engagement—data that are essential for designing effective and publicly supported policies.

A key aspect of this study is to determine whether the crises identified as top priorities by experts are perceived similarly by people across different cultures. Understanding these perception gaps can guide campaigns and initiatives to increase public engagement and support for mitigation efforts. This knowledge will also inform the development of culturally and contextually appropriate strategies, particularly in regions most vulnerable to crises like climate change, food insecurity, and forced migration. These insights can directly inform policies by identifying specific motivational barriers and facilitators that influence public support and action.

For policymakers, this project offers a dual benefit: (1) identifying areas where public motivation aligns or misaligns with expert priorities, enabling targeted communication strategies, and (2) providing a framework for designing policies that enhance motivational readiness in different cultures or regions. For example, in regions where Expectancy is low due to mistrust in institutions, strategies could focus on strengthening perceptions of government and community efficacy. Conversely, where Want is insufficient, policies could leverage public education campaigns to increase the perceived importance of addressing specific crises.

To ensure **effective communication** of these insights to policymakers, the project will produce policy briefs and frameworks that translate findings into actionable recommendations. These briefs will emphasize how interventions can be designed to close perception-reality gaps, enhance engagement, and foster collective action. Importantly, two members of the core team, **Małgorzata Kossowska** and **Manos Tsakiris**, bring valuable experience to this effort, having collaborated with the **Joint Research Center** (JRC) of European Commission on similar initiatives. Another team member, **Ying-yi Hong**, was a fellow of the Center for Advanced Study in the Behavioral Sciences (CASBS) at Stanford University and has built research networks in Singapore, Hong Kong, and China mainland. Additionally, **Arie Kruglanski** has extensive experience in international collaboration and has advised key institutions such as the **U.S. State Department and NATO**, providing valuable expertise in translating research insights into impactful policymaking. Their expertise in bridging scientific research and policy applications ensures that the recommendations will be both evidence-based and practically relevant for decision-makers.

To maximize outreach and impact, findings will be shared through multiple channels, including stakeholder workshops, webinars, and accessible media formats such as podcasts and infographics. Additionally, open access to data and reports will be provided, ensuring transparency and enabling broader collaboration among policymakers, researchers, and NGOs to encourage evidence-based policy adoption.

By identifying motivational drivers and mapping them to global challenges, this project provides actionable insights for policymakers, NGOs, and international organizations. The findings will inform strategies to bridge perception-reality gaps, foster collective action, and support global efforts to achieve the SDGs.

Research Questions and Hypotheses

The analysis will focus on four interconnected areas, each addressing key aspects of crisis perceptions and motivations:

1. **Descriptive and Exploratory Analysis: Perceptions and Motivations Across Countries**

In the first, descriptive part, we will examine perceptions of the identified crises and the individuals' motivations to mitigate them across different countries. Participants will be asked to what extent they perceive each crisis as real, serious, urgent, and close, how responsible they feel to act, and how prepared they consider their country to be in terms of its responsiveness. These perceptions will be compared across countries, ideally representing ten cultural clusters (Gupta et al., 2002; Mensah & Chen, 2013): (1) Anglo, (2) Latin Europe, (3) Nordic Europe, (4) Germanic Europe, (5) Central and Eastern Europe, (6) Latin America, (7) Sub-Saharan Africa, (8) MENA, (9) South Asia, and (10) Confucian Asia. This would allow to provide a comprehensive picture, potentially identifying regions perceiving the most severe crises. This analysis will also identify countries with the highest and lowest levels of awareness and investigate their motivations to act, including key determinants, such as the perceived importance (Want) and efficacy (Expectancy) components of Motivational Readiness Theory (MRT).

2. **Mapping perceptions and objective threats: Perception vs. Reality Mapping**

In the third part of our study, we will examine the alignment between public perceptions of global crises and objective country-level indicators. People's subjective assessments of crises may diverge from actual risks, creating a **perception-reality gap** that undermines effective policymaking and public trust (e.g., people deny climate change, Pew Research Center, 2023). Understanding this perception-reality gap is vital for policymakers and scholars, as it helps address misinformation, improve public trust, and guide targeted policy interventions.

Our study aims to bridge this gap by mapping individual perceptions to objective measures of crises. Using well-established country-level indices such as the GINI Index for inequality or the Political Stability Index for governance and conflict (see the complete list of indices in Supplementary Materials below), we will investigate whether public perceptions align with real-world threats. This analysis will quantify the degree of congruence between subjective and objective indicators, highlighting regions and crisis types with the largest discrepancies.

Once the perception-reality gaps are identified, we will examine their underlying drivers, focusing on the perception- and motivation-related variables outlined earlier. To further uncover global patterns, we will employ cluster analysis to group countries based on their alignment scores. This approach will highlight regions where public perceptions align closely with objective realities, as well as areas with significant gaps that may necessitate tailored communication strategies to improve public awareness and engagement.

To deepen our analysis, we plan to compare these clusters on meaningful cultural dimensions such as individualism-collectivism and tightness-looseness, which capture societal norms and values that may shape perceptions and behaviors. Additionally, we will examine **media-related indices**, such as media independence and media bias, as outlined in the Supplementary Materials. Media-related indices are critical because they directly influence public perceptions of crises by shaping the information individuals receive. Media independence ensures that information is free from government or corporate interference, enabling accurate and unbiased reporting on crises. Conversely, media bias can distort perceptions by amplifying certain threats while downplaying others, potentially widening the perception-reality gap. By analyzing these indices, we can better understand how the informational environment affects public awareness, trust, and engagement, offering actionable insights to address misinformation and improve crisis communication strategies.

These comparisons will provide a richer understanding of how cultural and informational contexts influence the perception-reality gap and help identify targeted strategies to address regional discrepancies.

3. **Confirmatory Analysis: Testing Hypotheses on Motivation to Mitigate Crises**

In the confirmatory phase, we will test hypotheses about the psychological mechanisms driving motivation to mitigate crises, as illustrated in Figure 1. Drawing primarily on **Motivational Readiness Theory** (Kruglanski et al., 2014) and related frameworks such as Value Expectancy Theory (Atkinson & Birch, 1970), Ajzen's Theory of Planned Behavior (1991), and Bandura's self-efficacy theory (1977, 2000), we hypothesize that motivation is driven by two key components: **Want**, the perceived importance of mitigating a crisis, and **Expectancy**, the belief that mitigation efforts will be effective (**Hypothesis 1**).

We further propose that Want and Expectancy are shaped by perceptions of crises, including their severity, urgency, personal relevance, and other contextual factors, as depicted in Figure 1 (**Hypothesis 2**). Additionally, individual-level variables unrelated to specific crises—such as trust in government, perceived collective efficacy, and perceptions of preparedness—are expected to influence motivation (**Hypothesis 3**).

Hypothesis 4 posits that the motivational components of Want and Expectancy will predict intentions to engage in three distinct types of actions: individual actions, collective actions, and increased support for policies aimed at mitigating crises or their effects.

Using multi-level structural equation modeling, this analysis will validate the relationships outlined in **Figure 1**, offering valuable insights into the psychological drivers of crisis engagement across diverse regions and crisis types. These findings will inform strategies to enhance public engagement and develop targeted interventions tailored to specific cultural and contextual needs.

4. Cross-Cultural Comparisons: Regional Variations in Motivational Readiness

This phase of the study will investigate whether motivational readiness—defined by the Want (perceived personal importance) and Expectancy (efficacy beliefs) components of the Motivational Readiness Theory—operates similarly across regions or if cultural and geopolitical factors produce distinct patterns of action. Specifically, we hypothesize that while the core mechanisms of Want and Expectancy are **universally applicable**, the factors contributing to specific levels of Want or Expectancy will vary across contexts. Additionally, we predict that Want and Expectancy will be significant predictors of willingness to act across countries, but the strength of these relationships may differ depending on cultural context (see Eom et al., 2016).

We propose the following hypotheses:

1. Hypotheses about Differences in the Levels of Want and Expectancy

a. Impact of Crisis Exposure: People in countries most **affected** by the crisis will have higher levels of Want compared to those in less affected regions.
b. Collectivism vs. Individualism: In collectivist societies (e.g., Confucian Asia, Sub-Saharan Africa), a stronger sense of collective **responsibility** will lead to higher levels of Want for societal actions. In individualistic cultures (e.g., Anglo, Germanic Europe), greater emphasis on personal responsibility will shape Want.
c. Institutional Trust: High **institutional trust** (e.g., in Nordic countries) will enhance Expectancy through stronger beliefs in collective and government efficacy. In regions with governance challenges (e.g., Sub-Saharan Africa), lower institutional trust will shift Expectancy to focus more on personal efficacy.
d. Affluence: Country-level and personal **affluence** will predict Expectancy, with higher affluence associated with stronger efficacy beliefs (see Hornsey & Pearson, 2024).

2. Hypotheses about Differences in the Strength of Relationships between Want/Expectancy and Willingness to Act

e. Want and Culture: The relationship between Want and willingness to act will be stronger in individualistic cultures (vs. collectivistic cultures), where personal responsibility and internal motivation drive behavior.
f. Expectancy and Culture: In collectivist cultures, collective efficacy will be a stronger predictor of willingness to act. In individualistic cultures, individual efficacy will play a more prominent role in predicting willingness to act.

3. Hypotheses about Differences in the Willingness to Act

g. Action Type and Culture: In collectivist cultures (e.g., Confucian Asia), Want and Expectancy will predict higher engagement in collective actions. In individualistic cultures (e.g., Anglo), Want and Expectancy will predict greater engagement in individual actions.

These findings will provide critical insights into the universality versus contextual specificity of motivational processes, offering a nuanced understanding of how crisis engagement varies globally. This knowledge will inform the development of tailored strategies for enhancing public engagement and resilience across diverse cultural and regional contexts.

Method

Sample Characteristics and Recruitment Strategy

The study will recruit participants from over 60 countries, ensuring robust representation across cultural, economic, and geopolitical contexts. Participants will be drawn from ten established cultural clusters, including Anglo, Latin Europe, Nordic Europe, Germanic Europe, Eastern Europe, Latin America, Sub-Saharan Africa, MENA, South Asia, and Confucian Asia. Each country will aim to contribute at least **500 participants**, resulting in a minimum total sample size of **30,000 participants**, which provides sufficient statistical power for cross-cultural comparisons. This target applies per country rather than per lab site; therefore, we will encourage multiple labs within the same country to collaborate in data collection efforts. Where feasible, we will also encourage labs to aim for 1,000 participants. However, in cases where 500 participants are unattainable—such as in hard-to-reach or low-income countries—we will consider accepting a lower number. Also, to support labs struggling to meet this threshold, financial assistance will be provided from the allocated budget to facilitate participation.

To further enhance the sample size and representation, we will encourage our partners to aim for 1,000 participants per country where feasible. Participating labs will be asked to estimate the number of participants they can realistically recruit. If 1,000 participants prove unattainable, we will accept 500 as the minimum. For labs that find 500 participants challenging due to resource constraints, we will offer financial support to ensure their inclusion.

To facilitate this, we have allocated a budget of **€30,000 from the Behavior in Crisis Lab** at Jagiellonian University to support recruitment efforts, particularly in low-income countries. This funding aims to reduce barriers for labs in under-resourced regions, ensuring equitable participation and maintaining the diversity and inclusivity of the sample.

To ensure inclusivity and diversity within the sample:

- **Diverse Core Team and Networks:** The core team includes members from research labs located in different parts of the world, such as the Behavior in Crisis Lab (Jagiellonian University, Poland), the Politics of Feelings Lab (Royal Holloway, University of London, UK), The Culture Lab (Ying-Yi Hong, Chinese University of Hong Kong), and Arie Kruglanski's Lab of Motivated Cognition (US). These collaborators bring a wealth of cross-cultural expertise and established international networks. These networks will be instrumental in contacting researchers to review the survey for cultural appropriateness and in recruiting labs across diverse regions.

- **Recruitment Partners:** Participants will be recruited through established international networks, including the Psychological Science Accelerator (**PSA**), **USERN** (Universal Scientific Education and Research Network)—a network that emphasizes participation from underrepresented regions, particularly in the East—and the **Live Better Project**, a collaborative initiative coordinated by researchers from the Polish Academy of Sciences with experience in conducting global surveys across 70+ countries, including underrepresented regions. Additionally, recruitment will leverage personal contacts from the Behavior in Crisis-Lab to further expand outreach.

- **Quota Sampling:** Recruitment will use quota sampling to ensure balanced representation across demographic variables such as age, gender, socioeconomic status, and urban/rural residence. This ensures that findings are not dominated by a single subgroup.

- **Targeted Outreach in Vulnerable Regions:** Special efforts will be made to engage participants from regions most affected by specific crises, such as Sub-Saharan Africa (climate change and food insecurity) or MENA (forced migration and conflict), to ensure their perspectives are accurately represented.

Feasibility Measures

- **Survey Platform and Language Accessibility:** Surveys will be conducted using a reliable open-source online platform (e.g., formr). with multilingual options to accommodate participants' native languages. This ensures accessibility and minimizes barriers to participation in diverse regions.

- **Pilot Study for Quality Assurance:** Before launching the large-scale survey, we will conduct a pilot study in **Poland** and the **UK** to test the survey design, question clarity, and distribution of responses. This pilot study will identify potential errors, capture issues related to question interpretation or technical implementation, and allow for improvements to the survey. The **Behavior in Crisis Lab (Jagiellonian University)** will finance this pilot phase to ensure the survey's reliability and validity before scaling to the global level.

  As part of the pilot, we will also assess whether having participants select a single crisis to rate is the best approach. If ceiling effects on Want are observed, we will consider randomly assigning participants to rate a specific crisis instead. While having participants rate all crises would be ideal for comprehensive data, it would make the survey excessively long and reduce its feasibility for large-scale implementation.

- **Support for Low-Income Regions:** Recognizing the challenges faced by researchers in low-income or underrepresented countries, we have allocated a budget of **€30,000** from the **Behavior in Crisis Lab** to support labs in these regions. This funding will cover participant compensation,ensuring equitable participation. By reducing financial barriers, we aim to encourage contributions from labs that might otherwise be unable to participate.

Inclusion and Exclusion Criteria

To participate in the study, individuals must meet specific inclusion criteria: participants must be at least 18 years old to ensure legal consent, demonstrate fluency in the language in which the survey is administered, and have access to an internet-capable device (e.g., computer, tablet, or smartphone). Exclusion criteria include failure to complete a significant portion of the survey, failing embedded attention checks designed to confirm engagement, submitting duplicate responses (detected through IP address monitoring), providing implausible or extreme answers (e.g., completion times significantly shorter than the median), or data corruption caused by technical issues. Participants failing to meet these criteria will be excluded, and any necessary replacements will be recruited through the same networks to maintain sample representativeness.

Ensuring Fair Framing Across Geopolitical Contexts

To ensure fair assessment of the themes across diverse geopolitical contexts, the study will employ culturally sensitive and inclusive framing during the design and implementation phases. This approach will account for cultural, geopolitical, and linguistic differences, while maintaining the integrity and comparability of the data.

- **Collaborative Input:** The survey instruments and framing of themes will be reviewed and pilot-tested by a diverse advisory panel composed of researchers from each of the ten cultural clusters identified for the study. This ensures that questions are not only linguistically accurate but also culturally appropriate and contextually relevant. The advisory panel will include individuals from underrepresented regions to ensure broad perspectives are incorporated.

- **Back-Translation and Validation:** Survey materials will undergo back-translation and validation processes to maintain conceptual equivalence across languages. This ensures that participants from different geopolitical contexts interpret the questions consistently, enabling accurate comparisons.

- **Bias Mitigation:** The design will incorporate strategies to minimize potential biases in participant responses, such as avoiding culturally charged terms or including general crisis scenarios that resonate globally. Particular attention will be given to avoiding framing that could disadvantage specific demographic or cultural groups.

- **Gender Inclusion:** The study will address gender issues explicitly, ensuring that questions are gender-sensitive and that recruitment processes aim for balanced representation of genders across regions. This approach acknowledges the unique perspectives and challenges faced by different genders in the context of global crises.

- **Co-Creation:** The study design will emphasize co-creation by engaging local researchers during the development phase. This participatory approach ensures that the survey captures regionally specific concerns while maintaining its overall comparability.

- **Open Access and Open Data:** To promote transparency and inclusivity, all data, survey instruments, and analysis scripts will be made openly accessible to researchers, policymakers, and other stakeholders. This commitment to open science ensures that the findings can be used globally to inform policy and further research on crisis perceptions and engagement. Data will be anonymized to protect participant privacy while enabling robust secondary analyses. Additionally, the study will be preregistered to outline hypotheses, methods, and analysis plans in advance, further enhancing the rigor and credibility of the research.

These measures aim to ensure that participants are assessed equitably, irrespective of cultural, geopolitical, or linguistic differences, while maintaining the integrity and comparability of the data. By integrating open science principles, addressing gender inclusion, and adopting a co-creation framework, this study sets a high standard for equity, inclusivity, and impact in global research.

Study Procedures

The study will be conducted online using a survey platform. All participants will begin by providing informed consent, outlining the study's purpose, their rights, and data confidentiality. The survey itself will assess perceptions of global crises, motivational readiness, intentions to act, and demographic variables, with strategically embedded attention checks to ensure data quality (see Supplementary Materials for the complete list). We aim the survey not to be too long (around 10-15 minutes).

To further enhance the reliability of the dataset, missing or invalid responses will be handled systematically. Excluded responses due to technical errors or participant failure will be compensated by expanding recruitment quotas within the same region, ensuring balance and representativeness. This robust approach to participant selection and data validation will provide high-quality data for meaningful cross-cultural comparisons.

Analysis Plan

1. Data Cleaning and Preprocessing Steps

- Exclude responses that fail embedded attention checks, are duplicates (identified via IP imonitoring), or have implausible response times (e.g., less than half the median completion time).

- Handle missing data systematically, with missingness patterns analyzed and addressed using imputation if appropriate.

- Conduct exploratory factor analysis on **pilot data** to confirm the dimensionality of combined indices, such as Expectancy and Willingness to Act. In the final study, we will check reliability with Cronbach's alpha.

- Match individual-level data with relevant country-level indicators, such as the GINI Index or Climate Vulnerability Index, to enable multi-level modeling.

2. Statistical Models

Descriptive and Exploratory Analyses

Objective: Examine cross-country differences in crisis perceptions and motivational readiness.
Analyses:

- Descriptive statistics and visualizations (e.g., heatmaps) for crisis perceptions (e.g., perceived urgency, closeness) across countries.
- ANOVA with post hoc Tukey tests to compare mean levels of Want, Expectancy, and the Willingness to Act across cultural clusters.

To examine cross-country differences in crisis perceptions and motivational readiness, we will begin with descriptive analyses that provide an overview of how participants from different countries perceive the severity, urgency, and personal relevance of global crises. These analyses will include the calculation of summary statistics, such as means and standard deviations, for key variables like perceived urgency, closeness, and preparedness. These descriptive findings will be visualized using heatmaps, which will display variations across countries, offering a clear visual representation of regional differences.

To explore differences in motivational readiness components—Want (perceived importance), Expectancy (efficacy beliefs), and Willingness to Act—across cultural clusters, we will perform statistical comparisons using analysis of variance (ANOVA). This approach will allow us to identify whether significant differences exist in these variables across the ten cultural clusters identified in the study (e.g., Anglo, Confucian Asia, Sub-Saharan Africa). Post hoc Tukey tests will follow the ANOVA to pinpoint specific pairwise differences between clusters, providing a more granular understanding of how these components vary culturally.

Mapping Perception vs. Reality

Objective: Quantify perception-reality gaps and identify their cultural and informational predictors.
Analyses:

- Compute congruence scores between perceived severity (individual-level data) and objective indicators (e.g., GINI Index, Political Stability Index).
- Hierarchical clustering to group countries based on their perception-reality alignment.
- Multi-level linear regression to examine predictors of alignment, including cultural dimensions (e.g., individualism-collectivism) and media indices (e.g., media independence, media bias).

To compute congruence scores between perceived severity and objective indicators, we will first prepare and standardize the data. At the individual level, participants' responses regarding the perceived severity of various crises will be aggregated by country, creating an average perceived severity score for each crisis within each nation. Concurrently, we will use objective indicators—such as the GINI Index for income

inequality or the Political Stability Index for governance—to represent the actual conditions in those countries.

To ensure comparability between subjective perceptions and objective metrics, both datasets will be standardized to a common scale, such as z-scores or min-max normalization. This step guarantees that differences between the two types of data are meaningful and not influenced by differing units or scales.

Next, we will calculate congruence scores to quantify the alignment between perceptions and reality. For each country and crisis, we will compute the absolute difference between the standardized perceived severity score and the corresponding standardized objective indicator. These congruence scores will reflect the degree of alignment, with lower scores indicating better alignment and higher scores indicating greater divergence between public perceptions and actual conditions.

We will then aggregate these congruence scores to explore patterns across different levels. At the country level, we will calculate an average congruence score across all crises to assess overall alignment for each nation. Similarly, we will compute crisis-specific averages across countries to identify which crises tend to have higher or lower perception-reality gaps globally. Finally, we will calculate a global-level average to provide a broad overview of alignment across all countries and crises.

To identify predictors of these congruence scores, we will perform regression analyses using cultural and informational variables, such as individualism-collectivism or media independence, as predictors. Cluster analysis will further group countries based on their congruence patterns, highlighting regions with similar levels of alignment or divergence.

The results will be visualized through heatmaps, scatterplots, and geographic maps, making it easier to interpret regional patterns and crisis-specific trends. These visualizations will help us identify areas where perceptions align closely with reality and those where significant gaps exist, offering actionable insights for targeted interventions to bridge these divides.

Confirmatory Hypotheses Testing

In this phase, we will formally test the theoretical model presented in Figure 1, which links key perceptual and motivational components to willingness to act in response to global crises. Multi-group structural equation modeling (SEM) will be used to estimate the relationships between perception factors (e.g., urgency, responsibility, impact) and Want (perceived importance), as well as between efficacy-related factors (e.g., perceived preparedness, resilience) and Expectancy (efficacy beliefs). Additionally, SEM will model the pathways from Want and Expectancy to Willingness to Act. Model fit will be evaluated using established fit indices (e.g., RMSEA, CFI, TLI) to ensure robustness and alignment with the theoretical framework.

Hypotheses on Want and Expectancy Levels

Objective: This analysis aims to test cultural and contextual differences in Want (perceived importance) and Expectancy (efficacy beliefs).

Analysis: Linear mixed-effects models (LMMs) will be employed to predict Want and Expectancy as dependent variables. Random intercepts will account for variability across countries, and random slopes will be included for the main predictor variables to allow for variability in their effects across countries (fixed effects will be used for control variables). Our independent variables will be cultural dimensions (individualism-collectivism), institutional trust, and affluence. These analyses will identify how these contextual factors influence motivational readiness levels, shedding light on cultural and structural drivers of crisis engagement.

Hypotheses on Relationship Strengths:
Objective: This analysis will evaluate how the strength of the relationships between Want/Expectancy and Willingness to Act varies across cultures.

Analysis: LMMs with random intercepts and slopes will be used to predict Willingness to Act (DV) based on Want and Expectancy (IVs). Moderator variables such as cultural dimensions (individualism-collectivism), and their interaction with Want and Expectancy will be tested (separate models for each moderation). Depending on the research question and the results of exploratory factor analysis (EFA), the analysis will focus on the overall Willingness to Act index or specific action types.

Hypotheses on Action Types:
Objective: This analysis tests whether Want and Expectancy predict collective versus individual action and examines how this varies across cultural clusters.

Analysis: LMM will be conducted for the willingness to act as a DV, Want and Expectancy as predictors, and action type (individual vs. collective) as a moderator. Additionally, a cultural dimension of collectivism-individualism will be included as a moderator, allowing for a nuanced examination of cultural variability in action types. Random intercepts and slopes for countries will account for variability at the country level.

3. Covariates

In the models, we will include individual-level covariates to account for personal characteristics. For analyses involving country-level variables, we will additionally incorporate relevant country-level covariates.

Individual-Level Covariates:

- Demographic variables: age, gender, socio-economic status, political orientation, and media consumption patterns.

Country-Level Covariates:

- GDP (as a measure of affluence). It the model testing the moderation hypothesis with affluence, GDP will be used as moderator.

Power Analysis

The primary goal of this study is to collect a sample that provides a rich and global representation of countries. We aim to recruit participants from 60 countries, with a target of 500 participants per country to ensure representation within each country. However, to ensure the study is not underpowered and to establish a minimum required sample size, we conducted a power analysis for our primary analyses, focusing on multi-level models, which are key to our study's design.

Based on prior studies examining Want, Expectancy, and cultural moderators of behavior (e.g., Kossowska et al., 2020; Eom et al., 2016), we anticipate small-to-moderate effect sizes for key predictors ($f2 = 0.02$ for individual-level predictors and $f2 = 0.01$ for interaction effects or country-level moderators). We set an alpha level of 0.05, which is standard in the discipline, and targeted a power level of 0.95 to meet the expectations for publication in high-impact journals.

To guide our calculations, we referenced the approach used in the TISP project, which utilized similar multi-level modeling techniques (albeit with different variables). Using the simr package, power simulations yielded the following results:

1. With a total sample size of 1,500 participants (n = 500 per country across c = 3 countries), we achieve 87% power to detect a fixed effect size of b = 0.20 on an outcome variable.
2. With the same total sample size (n = 500 in 3 countries), we achieve 86.5% power to detect a smaller fixed effect size of b = 0.10 on an outcome variable.
3. With a total sample size of 7,500 participants (n = 500 per country in 15 countries), we achieve 95.3% power to detect a fixed effect size of b = 0.10.

Based on these simulations, we determined that a minimum target sample size of 7,500 participants (with n = 500 in 15 countries) is required to ensure sufficient power for our analyses. However, our ideal target is to recruit a total of 30,000 participants (with n = 500 in 60 countries) to maximize representativeness and enable more nuanced cross-cultural comparisons.

Supplemental Materials

The study will explore perceptions of the following key global crises:

1) Climate Change and Environmental Degradation
2) Global Pandemics
3) Social Inequality
4) Rise of Authoritarianism and Political Instability
5) Cybersecurity Threats
6) Food Insecurity
7) Forced Migration and Refugees
8) Wars and Violent Conflicts

Participants will first be presented with a list of these crises and asked to rank them **in order of importance**, based on which they perceive as the most urgent to address. Regarding the crisis identified as the most important, participants will be asked the following sets of questions.

Crisis perception
Participants' perceptions of the crisis will be measured.

Introduction: "In the following section, you will see a list of threats that can be considered current crises. For each crisis, please respond to the questions based on your personal opinions and perceptions."

1) **reality**: How real is this crisis to you? Please rate the reality of this crisis on a scale from 1 to 7, where 1 = *definitely not real* and 7 = *definitely real*.

2) **urgency**: How urgent do you consider this crisis to be? Please rate the urgency of this crisis on a scale from 1 to 7, where 1 = *definitely not urgent* and 7 = *extremely urgent*.

3) **closeness**: How close or distant do you feel this crisis is to you personally? Please rate the closeness of this crisis on a scale from 1 to 7, where 1 = *very distant from me personally* and 7 = *very close to me personally*.

4) **impact**: How does this crisis affect the following people/groups? Please rate the impact on each entity on a scale from 1 to 7, where 1 = *completely unaffected* and 7 = *very affected*.

a. you personally
b. your family and friends
c. people in your country
d. people in other countries

5) **responsibility**: Who is responsible to mitigate the effects of this crisis? Please rate the responsibility of each of the entity on a scale from 1 to 7, where:1 = *definitely not responsible* and 7 = *very responsible*.

a. international organizations (e.g., UN, WHO)
b. national government
c. experts (e.g., politicians, scientists, doctors)
d. our society
e. you
f. everyone / every human on the planet

6) **Emotions**: "What emotions does thinking about this crisis evoke in you? Please rate the extent to which you feel each emotion on a scale from 1 (*not at all*) to 7 (*extremely*)." List of emotions adapted from Eadeh et al. (2017) and Watson et al. (1988).

Positive Emotions:
- Satisfied
- Pleased
- Happy
- Comforted
- Proud
- Relieved
- Determined

Negative Emotions – Fear/Anxiety:
- Nervous
- Scared
- Afraid
- Fearful
- Anxious
- Hopeless
- Worried
- Uncertain

Negative Emotions – Anger:
- Mad
- Angry
- Furious
- Disgusted
- Revulsed
- Frustrated
- Sickened

7) **Preparedness**. How prepared do you consider your country to be to handle this crisis? Please rate the preparedness on a scale from 1 to 7, where:1 = *definitely not prepared* and 7 = *definitely prepared.*

8) **Resilience**: How resilient do you consider your country to be to this crisis? Please rate the resilience on a scale from 1 to 7, where:1 = *definitely not resilient* and 7 = *definitely resilient.*

Motivation to support mitigation efforts and its components

Personal importance – importance individuals attach to mitigating the crisis and its effects (based on Kruglanski et al.'s, 2014, motivational readiness theory Atkinson & Birch's, 1970, Value-Expectancy Theory; items as in Kossowska et al., 2020; Szumowska et al., 2024):

1) **personal importance:** How personally important is it for you to mitigate this crisis and its effects? Please rate the personal importance on a scale from 1 to 7, where 1 = *definitely unimportant* and 7 = *extremely important*.

Expectancy – individuals' confidence in the possibility to mitigate the crisis and its effects, as well as their and their community's ability to take meaningful actions to mitigate the crisis (based on Bandura's self-efficacy theory, Bandura, 1977, 2000; Kruglanski et al.'s, 2014, motivational readiness theory Atkinson & Birch's, 1970, value-expectancy theory, and Vroom's, 1964, expectancy theory):

1) **outcome expectancy (response efficacy):** How confident are you that effective actions can be taken to reduce the impact of this crisis? Please rate your confidence on a scale from 1 to 7, where 1 = *not confident at all* and 7 = *extremely confident*.

2) **personal expectancy (self-efficacy):** How confident are you in your ability to take action to reduce the impact of this crisis? Please rate your confidence on a scale from 1 to 7, where 1 = *not confident at all* and 7 = *extremely confident*.

3) **collective/ community efficacy:** How confident are you that people in your country and community can work together to reduce the impact of this crisis? Please rate your confidence on a scale from 1 to 7, where 1 = *not confident at all* and 7 = *extremely confident*.

4) **government efficacy:** How confident are you that the government in your country can take effective actions to reduce the impact of this crisis? Please rate your confidence on a scale from 1 to 7, where 1 = *not confident at all* and 7 = *extremely confident*.

   Indices of Expectancy: The four expectancy questions will be combined into one index (if justified based on Exploratory Factor Analysis of the pilot data). However, they can also be analyzed separately to explore questions about personal versus government efficacy.

Motivation and Commitment to Mitigation Efforts – these items assess participants' willingness to act and their behavioral intentions to change, both individually and collectively. The framework draws on Ajzen's (1991) *Theory of Planned Behavior* and the behavioral commitment measures by Cialdini (2009). Items related to advocacy and awareness are adapted from van Zomeren et al. (2008), while the distinction between activism and individual behavior follows Stern (2000).

5) **Willingness to Change Behavior:**
   How willing are you to take actions within your capacity, including changing your behavior and daily routines, to reduce the impact of this crisis? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

6) **Willingness to Invest Time and Money:**

How willing are you to donate a portion of your income (e.g., 1-5%) to help organizations working to mitigate this crisis? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

How willing are you to volunteer your time (e.g., 1-5 hours per month) to help address this crisis? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

How willing are you to participate in **local** community activities (e.g., clean-ups, educational programs) aimed at mitigating this crisis? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

How willing are you to participate in **global** policies and initiatives aimed at mitigating this crisis? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

7) **Willingness to Engage in Collective Actions**:
How willing are you to participate in a local or global initiative (e.g., attending meetings, signing petitions) to address this crisis? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

How willing are you to join a protest or demonstration in response to this crisis? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

How willing are you to join an organization or group actively working to mitigate the effects of this crisis? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

8) **Willingness to Advocate and Raise Awareness** (based on van *Zomeren et al., 2008*):
How willing are you to advocate for stronger government policies to mitigate this crisis? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

9) **Willingness to Support Policies:**
How willing are you to support stronger government policies to mitigate the impact of this crisis? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

10) **Willingness to Learn and Educate Oneself:**
How willing are you to educate yourself more on the causes and impacts of this crisis to better understand how to take action? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

How willing are you to commit to attending informational events (e.g., webinars, workshops) or reading up on the crisis to improve your knowledge? Please rate your willingness on a scale from 1 to 7, where 1 = *not willing at all* and 7 = *very willing*.

Willingness to Act Index: We will create a summary index of the willingness/ motivation to act (if warranted by EFA).

Behavior

1) **Reported past behavior:**

In the last 6 months, have you taken any actions to address this crisis (e.g., donated, volunteered, protested, changed lifestyle habits)? (Yes/No)

How frequently have you engaged in behaviors to mitigate this crisis in the past year? Please rate the frequency on a scale from 1 to 7, where 1 = *never* and 7 = *very frequently*.

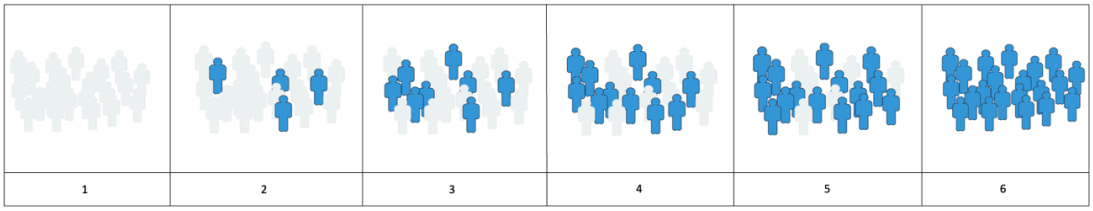
2) **Resource allocation task:**

In an online game-like setting, participants are asked to allocate a limited amount of resources (e.g., 100 hypothetical dollars) to crisis mitigation efforts related to the seven crises participants saw at the beginning.

"Imagine you/ your country's government has 100 dollars to allocate to help mitigate the effects of selected crises. How would you divide your resources?"

Individual-level variables

1. **Personal Connectedness**. From not at all connected (white figures) to completely connected (blue figures), how connected do you feel to others of your country?



2. **Political orientation:** How would you describe your political views on social and cultural issues?

   Progressive views are understood as attachment to freedom and openness to novelty and diversity. Conservative views mean attachment to traditional values, customs and institutions. (Scale: 1 *Progressive* - 7 *Conservative*)

   How would you describe your views on economic issues?

   Social-democratic views are understood as striving for greater economic equality, caring for the well-being of citizens and consent to state intervention in the economy. Free market views are understood as attachment to the principles of the free market, restrictions on the public sector and the need to increase the freedom of economic activity. (Social: 1 *Social-democratic* - 7 *Free market)*

3. **Political Engagement:** "How actively do you participate in political activities (e.g., voting, campaigning, attending protests)?"(Scale: 1 = *Not at all active*, 4 = *Moderately active*, 7 = *Very active*)

4. **Religion**: "Are you a religious person? Please rate on a scale from 1 to 7, where 1 = *definitely not* and 7 = *definitely yes*."

5. **Religious affiliation**: “Do you identify with any of the below religions? Please select one of the following options:

- Christianity (e.g., Catholic, Protestant, Orthodox)
- Islam (e.g., Sunni, Shia)
- Hinduism
- Buddhism
- Sikhism
- Judaism
- Baha'i Faith
- Jainism
- Shinto
- Other (please specify): _____
- No religion (Agnostic, Atheist, Secular)
- Prefer not to say”

6. **Media Use**:

Frequency of Media Consumption: “How frequently do you consume news or information from traditional media sources (e.g., TV, newspapers, radio?” [Scale: 1 = Never, 2 = Rarely, 3 = Occasionally, 4 = Often, 5 = Very Often]

Frequency of Social Media Use: “How frequently do you use social media platforms (e.g., Facebook, Twitter, Instagram, TikTok)?” [Scale: 1 = Never, 2 = Rarely, 3 = Occasionally, 4 = Often, 5 = Very Often]

Partisan Media Preferences: “How often do you consume news or information from media sources that align with your political views?” [Scale: 1 = Never, 2 = Rarely, 3 = Occasionally, 4 = Often, 5 = Very Often]

Diverse Media Exposure: “How often do you consume news or information from media sources that oppose your political views?” [Scale: 1 = Never, 2 = Rarely, 3 = Occasionally, 4 = Often, 5 = Very Often]

7. **Demographics**: Gender, Age, Education, Residence, Socio-economic Status

Country-level variables (not to be collected in the study)

We plan to utilize existing country-level variables that are relevant to each crisis. Examples are provided below. The final selection of variables will depend on the countries included in the study, prioritizing those with the most comprehensive and reliable data coverage to ensure consistency and comparability across regions.

1. Global Pandemics

- **COVID-19 Vulnerability Index (CVI)**
  - Justification: This index captures a country's readiness to cope with the pandemic, including healthcare infrastructure, economic resilience, and government response.
  - Source: World Health Organization (WHO), Johns Hopkins University, and the Global Health Security (GHS) Index.
- **Healthcare System Performance Index**
  - Justification: Measures the effectiveness, accessibility, and quality of a country's healthcare system, a critical factor in pandemic response.
  - Source: World Health Organization, World Bank Health Indicators.

2. Climate Change and Environmental Crisis

- **Climate Vulnerability Index (CVI)**

    - Justification: Assesses a country's susceptibility to climate change impacts like extreme weather, rising sea levels, and desertification.
    - Source: Notre Dame Global Adaptation Index (ND-GAIN), Climate Risk Index (Germanwatch).
- **Environmental Performance Index (EPI)**
    - Justification: Tracks environmental health and ecosystem vitality, highlighting a country's ecological sustainability.
    - Source: Yale University's EPI database.
- **Carbon Emission Per Capita**
    - Justification: Provides an indicator of a country's contribution to global emissions and environmental stress.
    - Source: Global Carbon Project, International Energy Agency (IEA).

3. Social Inequality

- **GINI Index**
    - Justification: Measures income inequality within a country.
    - Source: World Bank, United Nations Development Programme (UNDP).
- **Gender Inequality Index (GII)**
    - Justification: Reflects gender-based disparities in areas such as reproductive health, empowerment, and labor market participation.
    - Source: United Nations Development Programme (UNDP).
- **Human Development Index (HDI) with Inequality-Adjusted HDI**
    - Justification: Assesses both overall human development and how it is affected by inequality.
    - Source: UNDP Human Development Report.

In these analyses, we will also account for countries' affluence, using GDP as a control variable to better isolate the effects of inequality measures.

4. Rise of Authoritarianism and Political Instability

- **World Governance Indicators (WGI)**
    - **Sub-Indices**:
        1. Political Stability and Absence of Violence (PSNV) – Stability of the political environment.
        2. Voice and Accountability (VA) – Extent of citizen participation and government transparency.
        3. Government Effectiveness (GE) – The quality of public services and policy implementation.
        4. Regulatory Quality (RQ) – The government's ability to formulate and enforce policies.
        5. Rule of Law (RL) – Public confidence in laws, property rights, and judicial system.
        6. Control of Corruption (CC) – Degree of corruption in public services and institutions.
    - Justification: These indicators reflect governance quality, institutional resilience, and vulnerability to authoritarianism.
    - Source: World Bank.
- **Freedom in the World Index**
    - Justification: Measures the degree of political rights and civil liberties, highlighting the potential for authoritarian shifts.
    - Source: Freedom House.

- **Democracy Index**
    - Justification: Ranks countries based on democratic processes and political pluralism.
    - Source: Economist Intelligence Unit (EIU).

5. Cybersecurity Threats

- **Global Cybersecurity Index (GCI)**
    - Justification: Assesses countries' commitment to cybersecurity across legal, technical, orgacnizational, capacity-building, and cooperation dimensions.
    - Source: International Telecommunication Union (ITU).
- **Internet Penetration and Digital Infrastructure**
    - Justification: Internet penetration rates and digital infrastructure quality can influence vulnerability to cyber threats.
    - Source: World Bank, International Telecommunication Union (ITU).
- **Cyber Threat Readiness Index**
    - Justification: Captures the preparedness of countries to deal with cybersecurity threats.
    - Source: Data aggregators like Microsoft Security Intelligence.

6. Food Insecurity

- **Global Food Security Index (GFSI)**
    - Justification: Measures the affordability, availability, quality, and safety of food across countries.
    - Source: Economist Intelligence Unit (EIU).
- **Prevalence of Undernourishment (PoU)**
    - Justification: Directly assesses the population's access to adequate food.
    - Source: Food and Agriculture Organization (FAO), World Bank.
- **Agricultural Productivity Index**
    - Justification: Measures agricultural output and sustainability, relevant for understanding food security at a national level.
    - Source: World Bank, FAO.

7. Forced Migration and Refugees

- **Migration Index**
    - Justification: Tracks forced migration patterns, including refugee populations and asylum seekers.
    - Source: United Nations High Commissioner for Refugees (UNHCR), World Bank.
- **Internal Displacement Index**
    - Justification: Provides data on individuals displaced within their own countries due to conflict, violence, or natural disasters.
    - Source: Internal Displacement Monitoring Centre (IDMC).
- **Refugee Population by Country of Origin and Host Country**
    - Justification: Highlights countries that are sources and destinations of forced migration.
    - Source: UNHCR, World Bank.

8. Wars and Violent Conflicts

- **Political Stability and Absence of Violence (WGI)**
    - Justification: Captures political stability and violence, relevant to countries facing or recovering from conflict.
    - Source: World Bank.
- **Global Peace Index (GPI)**

    - Justification: Ranks countries based on the relative peacefulness of societies and the presence of ongoing conflicts.
    - Source: Institute for Economics & Peace (IEP).
- **Conflict Barometer**
    - Justification: Tracks active conflicts, including their intensity and impact.
    - Source: Heidelberg Institute for International Conflict Research (HIIK).
- **Terrorism Index**
    - Justification: Measures the impact of terrorism in various countries.
    - Source: Global Terrorism Index (GTI) by Institute for Economics & Peace (IEP).
- **Fragile States Index**
    - Justification: Assesses a country's vulnerability to conflict or collapse based on social, political, and economic indicators.
    - Source: Fund for Peace.

Media Use Indices:

Media Environment and Crisis Information Presentation

- **Press Freedom Index**:
    - Justification: In countries where press freedom is restricted, the media may not accurately report on crises, leading to skewed public perceptions. A free press is more likely to provide diverse and critical coverage of crises.
    - Source: Reporters Without Borders, Freedom House.
- **Media Pluralism Index**:
    - Justification: Media pluralism measures the diversity of media outlets and voices in a country. Countries with higher media pluralism are more likely to provide balanced coverage of crises, potentially reducing the gap between perception and reality.
    - Source: European University Institute (EUI), Media Pluralism Monitor (MPM).
- **Trust in Media**:
    - Justification: Public trust in the media can influence how accurately people perceive crises. In countries where media outlets are seen as reliable, people may have perceptions that better reflect reality, while in countries with low trust, the perception gap may widen.
    - Source: Edelman Trust Barometer, Reuters Institute Digital News Report.
- **Social Media Penetration**:
    - Justification: High levels of social media usage can influence public perceptions, especially in cases where misinformation spreads easily. Social media can amplify perceived crises or distortions, particularly in countries with high internet penetration but limited media regulation.
    - Source: World Bank, Global Digital Reports (We Are Social & Hootsuite).
- **Crisis Coverage Intensity**:
    - Justification: This could capture how extensively and intensively a country’s media covers specific crises (e.g., pandemics, conflict, terrorism). Countries where the media heavily focuses on certain crises may have a population more attuned to those issues, even if the objective threat is low.
    - Source: Content analysis of news sources or databases like LexisNexis.
- **Media Bias Index**:
    - Justification: Measures the degree of bias in the media, either toward government narratives or particular ideological perspectives. A biased media environment can distort public perceptions of crises, especially if the media emphasizes certain threats over others.
    - Source: Various indices depending on the region, such as the Media Bias Chart.

- **Misinformation Vulnerability Index**:
    - Justification: In countries prone to misinformation, particularly during crises, public perceptions of threats may be more distorted. This index could measure the frequency and impact of misinformation, especially through online platforms.
    - Source: Global Disinformation Index (GDI), International Fact-Checking Network (IFCN).

Government Transparency

- **Government Transparency Index**:
    - Justification: Transparent governments are more likely to provide accurate and timely information about crises, which can help reduce the gap between public perception and objective reality.
    - Source: Open Government Partnership (OGP), World Bank Governance Indicators (Control of Corruption and Government Effectiveness).

References

Atkinson, J. W., & Birch, D. (1970). *The Dynamics of Action.* John Hopkins & Sons.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215.

Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, *9*(3), 75-78.

Bouman, T., Steg, L. & Dietz, T. (2021). Insights from early COVID-19 responses about promoting sustainable action. *Nature Sustainability, 4*, 194–200.

Byrne, D., & Callaghan, G. (2022). *Complexity theory and the social sciences: The state of the art*. Taylor & Francis.

Eadeh, F. R., Peak, S. A., & Lambert, A. J. (2017). The bittersweet taste of revenge: On the negative and positive consequences of retaliation. *Journal of Experimental Social Psychology, 68*, 27–39

Eom, K., Kim, H. S., Sherman, D. K., & Ishii, K. (2016). Cultural variability in the link between environmental concern and support for environmental action. Psychological Science, 27(10), 1331-1339.

Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach.* Psychology Press.

Forster, T., & Heinzel, M. (2021). Reacting, fast and slow: how world leaders shaped government responses to the COVID-19 pandemic. *Journal of European Public Policy*, *28*(8), 1299-1320.

Gupta, V., Hanges, P. J., & Dorfman, P. (2002). Cultural clusters: Methodology and findings. *Journal of World Business*, *37*(1), 11-15.

Henig, D., & Knight, D. M. (2023). Polycrisis: Prompts for an emerging worldview. *Anthropology Today*, *39*(2), 3-6.

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*, 102338.

Intergovernmental Panel on Climate Change (IPCC). (2021). *Climate Change 2021: The Physical Science Basis*. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press. https://www.ipcc.ch/report/ar6/wg1/

Kałwak, W., Weziak-Bialowolska, D., Wendołowska, A., Bonarska, K., Sitnik-Warchulska, K., Bańbura, A., ... & Izydorczyk, B. (2024). Young adults from disadvantaged groups experience more stress and deterioration in mental health associated with polycrisis. *Scientific Reports*, *14*(1), 8757.

Kossowska, M., Szumowska, E., Szwed, P., Czernatowicz-Kukuczka, A., & Kruglanski, A. W. (2020). Helping when the desire is low: Expectancy as a booster. *Motivation & Emotion*, *44*, 819-831.

Kossowska, M., Szwed, P., Czernatowicz‐Kukuczka, A., Perek‐Białas, J., Szumowska, E., Kruglanski, A. W., ... & Załuski, W. (2024). Socio‐psychological barriers preventing people from helping in times of crisis: A scoping review. *Journal of Community & Applied Social Psychology, 34*(2), e2775.

Kruglanski, A. W., Chernikova, M., Rosenzweig, E., & Kopetz, C. (2014). On motivational readiness. *Psychological Review*, *121*(3), 367.

Lawrence, M., Homer-Dixon, T., Janzwood, S., Rockstöm, J., Renn, O., & Donges, J. F. (2024). Global polycrisis: the causal mechanisms of crisis entanglement. *Global Sustainability*, *7*, e6.

Lawrence, M., Janzwood, S., & Homer-Dixon, T. (2022). *What is a global polycrisis*. Cascade Institute, Technical Paper, 4.
Lidskog, R., Elander, I., & Standring, A. (2020). COVID-19, the climate, and transformative change: comparing the social anatomies of crises and their regulatory responses. *Sustainability*, *12*(16), 6337.
Mensah, Y. M., & Chen, H. Y. (2013). Global clustering of countries by culture–an extension of the GLOBE study. *Available at SSRN 2189904*.
Pauchant, T. C., & Mitroff, I. I. (1990). Crisis management: Managing paradox in a chaotic world. *Technological Forecasting and Social Change*, *38*(2), 117-134.
Pew Research Center. (2023, August 9). *Why some Americans do not see urgency on climate change*. Pew Research Center. https://www.pewresearch.org/science/2023/08/09/why-some-americans-do-not-see-urgency-on-climate-change/
Restrepo-Mieth, A., Perry, J., Garnick, J., & Weisberg, M. (2023). Community-based participatory climate action. *Global Sustainability,* 6, e14.
Ripple, W. J., Wolf, C., Gregg, J. W., Levin, K., Rockström, J., Newsome, T. M., Betts, M. G., Huq, S., Law, B. E., Kemp, L., Kalmus, P., Lenton, T. M. (2022). World Scientists' Warning of a Climate Emergency 2022, *BioScience*, *72*(12), 1149–1155.
Roe, D. (2019). Biodiversity loss-more than an environmental emergency. *The Lancet. Planetary health*, *3*(7), e287–e289.
Stern, P. C. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues, 56*(3), 407-424.
Stern's model of environmentally significant
Szumowska, E., Jasko, K., Dukała, K., & Górska, P. (2024). Goal cycle: Antecedents and consequences of goal progress. *Motivation & Emotion*.
United Nations. (2023). *The sustainable development goals report*. United Nations. Retrieved from https://unstats.un.org/sdgs/report/2023/
Voss, M., & Lorenz, D. F. (2016). Sociological foundations of crisis communication. *The handbook of international crisis communication research*, 45-55.
Vroom, V. H. (1964). *Work and motivation.* Wiley.
Wallis, H., Sieverding, T., Schmidt, K., & Matthies, E. (2022). #Fighteverycrisis: A psychological perspective on motivators of the support of mitigation measures in the climate crisis and the COVID-19 pandemic. *Journal of Environmental Psychology, 84,* 101898.
Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063–1070.
World Health Organization (WHO). (2020). *WHO global influenza strategy 2019-2030*. World Health Organization. https://www.who.int/publications/i/item/9789241515320
Zabaniotou, A. (2020). A systemic approach to resilience and ecological sustainability during the COVID-19 pandemic: Human, societal, and ecological health as a system-wide emergent property in the Anthropocene. *Global Transitions*, *2*, 116-126.

Personnel

Proposed Personnel and Administrative Plan

The proposed project will be led by the principal investigator (PI) with support from the Psychological Science Accelerator (PSA) and a dedicated administrative team. By leveraging PSA's extensive resources, infrastructure, and expertise, as well as the resources and networks of the Behavior in Crisis Lab (BIC-L), we aim to ensure the successful implementation of this study across diverse geopolitical and cultural contexts.

Leadership and Coordination

The project will be coordinated by the **Behavior in Crisis Lab** at Jagiellonian University in Krakow, Poland, under my leadership as the principal investigator. My responsibilities will include overseeing all

phases of the study, managing communication with collaborators, and ensuring adherence to timelines and ethical standards. I bring experience in large-scale, international collaborations, including my previous contributions to PSA projects such as PSA 008, PSA Error Correction, and PSA Minimal Groups, as well as involvement in Many Labs 2 and SCORE projects led by the Open Science Framework. My recent work with the Live Better Project and active membership in the Universal Scientific Education and Research Network (USERN) have further strengthened my ability to establish networks across diverse regions and research contexts.

The core leadership team will also include:

- **Małgorzata Kossowska**, leading the Behavior in Crisis Lab, with extensive experience in crisis psychology and large-scale international collaborations.

- **Manos Tsakiris,** leading the Politics of Feelings Lab at Royal Holloway, University of London, who brings expertise in emotional and political engagement across cultures.

- **Ying-Yi Hong,** Director of The Culture Lab at the Chinese University of Hong Kong, whose work on cultural dynamics and cross-cultural psychology will guide survey design and implementation in diverse contexts.

- **Arie Kruglanski,** Director of the Lab of Motivated Cognition in the US and the founder of Motivational Readiness Theory, whose contributions will ensure that the theoretical framework is robustly applied and empirically tested.

This core team's diverse expertise and global networks will ensure effective project coordination, rigorous design, and meaningful implementation across cultural contexts.

Core Team and Advisory Board

The core team will collaborate with an **advisory board of researchers** representing the ten cultural clusters identified in the study: Anglo, Latin Europe, Nordic Europe, Germanic Europe, Eastern Europe, Latin America, Sub-Saharan Africa, MENA, South Asia, and Confucian Asia. This advisory board will provide guidance on cultural adaptation, ensure the survey's relevance and appropriateness in their respective regions, and assist in recruitment efforts. By drawing on their local expertise, the advisory board will play a critical role in maintaining the study's inclusivity and validity.

Administrative Team Roles

To ensure the project's feasibility and efficiency, we will collaborate with PSA committees and networks to fill the following administrative roles:

- **Project Monitoring**: A project manager will oversee progress, track milestones, and ensure timely updates while addressing logistical challenges.
- **Data Management**: A data manager will handle data validation, secure storage, and analysis, ensuring compliance with open science principles and facilitating anonymized data sharing.
- **Implementation Coordination**: An implementation coordinator will standardize survey administration across sites, manage platform logistics, and resolve methodological issues.
- **Translation Monitoring**: A translation monitor will manage accurate translations and back-translations to maintain cultural and linguistic appropriateness in all regions.
- **Ethics Monitoring**: An ethics monitor will ensure compliance with international ethical standards, including local IRB approvals and informed consent procedures.

- **Content Experts**: Specialists in crisis psychology, cross-cultural research, and public engagement will provide domain-specific expertise to refine study materials and analyses. This expertise will be drawn from the **Behavior in Crisis Lab** and PSA's extensive network.

Recruitment and Support

Personnel for these roles will be recruited through PSA committees, capitalizing on their expertise in assembling administrative teams for global projects. Additional support will be drawn from my professional networks, including USERN, the **Live Better Project**, and the Behavior in Crisis Lab. This strategy ensures the administrative team will include individuals with relevant expertise and a strong commitment to the project's success.

Feasibility

The scale and scope of this project are ambitious but achievable with the proposed administrative structure. By combining PSA's established infrastructure with the Behavior in Crisis Lab's international collaboration experience and access to extensive networks, this project is well-positioned to meet its objectives efficiently and effectively. The inclusion of a global advisory board and a highly skilled core team ensures that cultural nuances are addressed during survey design and implementation. Regular communication, clear role delineation, and robust support systems will ensure smooth execution and high-quality outcomes.