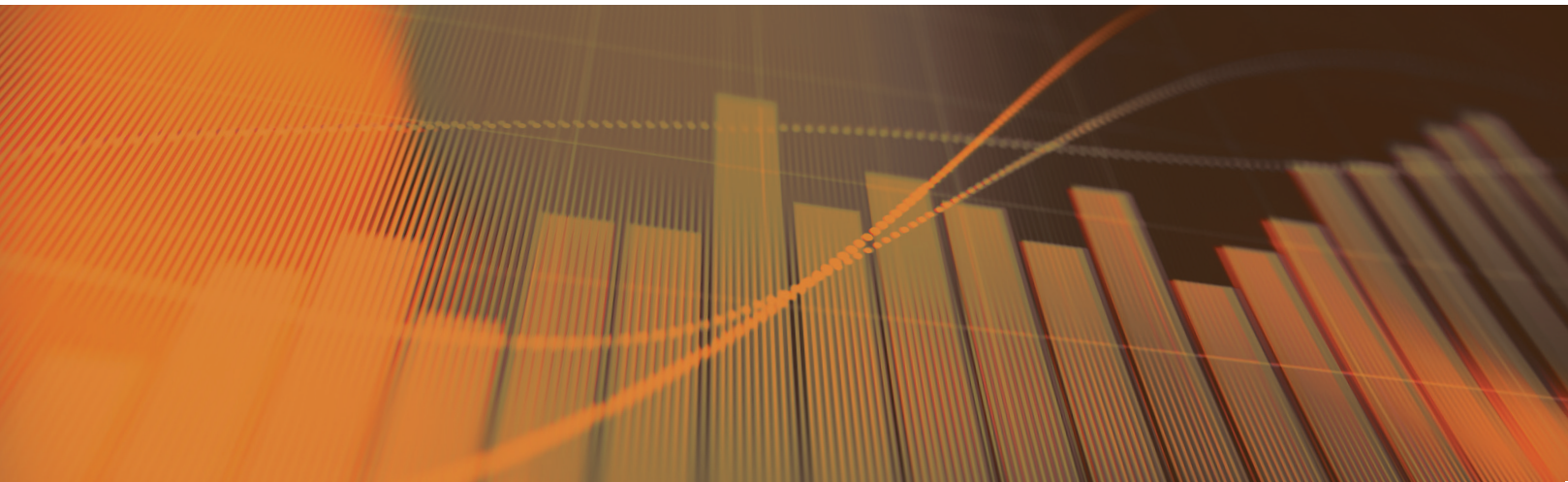


How to read SCORE?

A guide to understand and interpret main data analysis products



Prepared by the Centre for Sustainable Peace
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scoreforpeace.org



OUTLINE:

- Indicators and items: SCORE building blocks
 - Frequencies: Items unpacked
 - Heatmaps: Geographical representation
 - Models: Explaining causes and effects
 - Cluster analysis: Understanding populations
-

Indicator – a SCORE measurement unit used to assess social phenomenon on a 0-10 scale, where 0 is absence of the phenomenon in society and 10 its maximum presence. For example, Economic Security, Trust in Media, Aggression.

Item – a question used to measure an indicator is called an item. We usually combine multiple items to create indicators. Items are not usually shown on the platform, but can be presented upon request in frequencies.

Frequencies, also known as percentages, are presentation of answers to individual question items in %.

Heatmaps illustrate regional distribution of an indicator to help prioritize interventions geographically and trace general trends.

Models represent cause-effect relations between different social phenomena (indicators). Models have predictive power and are used to identify key drivers of desired changes in society.

Cluster analysis, also known as population segmentation, groups people based on their answers about 1-3 indicators and looks at their profiles to prioritize interventions and understand target audiences.

Who is SeeD?

The Centre for Sustainable Peace and Democratic Development (SeeD) is a research-driven innovation hub, generating evidence to inform peacebuilding policies and programmes around the world.

Together with local and international partners, we help identify root causes of conflict and drivers of positive change. So far, our efforts have reached Ukraine, Moldova, Cyprus, Liberia, Malaysia, Nepal, Armenia, Georgia, Azerbaijan, Iraq, Bosnia and beyond.

What is SCORE?

Social Cohesion and Reconciliation Index (SCORE) is a scientific assessment tool based on robust process and content frameworks. SeeD uses SCORE to answer questions about social dynamics that can undermine or reinforce cohesion, reconciliation and resilience. From thousands of participants, we collect data through extensive surveys, asking people about their social relations, political preferences, civic attitudes, daily challenges and life (soft) skills. By analysing this data, we can give answers on how to change society for the better.

Who this manual is for?

In this manual we explain how to read main products of the SCORE analysis to help practitioners, implementation partners, intervention designers and policy-makers interpret our findings. By introducing SCORE methodology as our innovative and versatile evidence generator, we aim to contribute to evidence-based decision making for a more cohesive and peaceful society.

What is an indicator?

Indicators are what we use to accurately measure various different social phenomena, such as feeling of soviet nostalgia, pro-EU orientation or civic engagement. Indicators are SCORE's building blocks. They are presented in the form of heatmaps on the SCORE web platform, used for modelling and to run cluster analysis (explained in Section 5 of this booklet).

Indicator value is from 0 to 10, where 0 is absence of the phenomenon in society and 10 its maximum presence. Each indicator is measured through a range of questions, which in SeeD we call **items**. The responses to each item are added together to obtain a total score for the indicator. Multiple items are used to look at the same phenomenon from different angles, this way we get an accurate picture of that phenomenon in society.

For example, feeling nostalgic about the soviet past in Ukraine is measured using the Soviet Nostalgia indicator. It consists out of 7 questions (**Fig 1**), each carefully selected as a result of literature reviews, interviews with local stakeholders and experts, and wider focus groups with the general public.

Each respondent receives a score for every indicator from zero to ten, depending on their answers to each of the indicator's item. Then we combine all scores together to have one score for the indicator.

Some indicators may be composites, we sometimes call these **meta-indicators** or **composite indicators**. This means that the indicator is made-up of two or more sub-indicators such as, for example, Pro-EU orientation that consists of the support for the EU, EU Benefit and EU vote indicators.



Figure 1: Soviet Nostalgia indicator and its items

The next example shows how this is calculated for Soviet Nostalgia.



Dasha thinks education and healthcare were better in Soviet times, but disagrees with the other 5 items. Because she said yes to 2 items, she gets a score of **2 out of 7**, or **29%**. We convert this to a **score out of ten** and get Dasha's score of **2.9** for Soviet Nostalgia.



Michael thinks that things were not better in Soviet times, and has no regrets about the collapse of the Soviet Union. That's **0 out of 7**, or **0%**. This gives Michael a score of 0 for Soviet Nostalgia.



Petrushka is extremely regretful about the collapse of the Soviet Union, and she thinks nearly everything was better in Soviet times. She answered yes to 6 items and no to 1. That's **6 out of 7**, or **86%**. This is a score of **8.6 out of 10** for Soviet Nostalgia.

For this indicator, a score of 10 means that they have extremely high Soviet Nostalgia and they believe that everything was better in the Soviet Union. A score of 0 means they don't feel any soviet nostalgia, and they don't believe things were better during soviet times at all. Thus, if our community has three citizens – Dasha, Michael and Petrushka – its Soviet Nostalgia score would be $(2.9 + 0 + 8.6) : 3 = 5.8$.

Each indicator then can be **disaggregated** based on different age groups, settlement type (rural or urban areas), gender and Socio-Demographic Capital Risk Index (SDI) ¹. This information can potentially help stakeholders to identify the target audience for their policies and interventions. For example, if we review these figures for Soviet Nostalgia (Fig 2-5), we see that interventions should target older generations who are more vulnerable (high SDI index).

¹ Index that assesses how unstable a person is based on their average income, number of people in their household and education level.

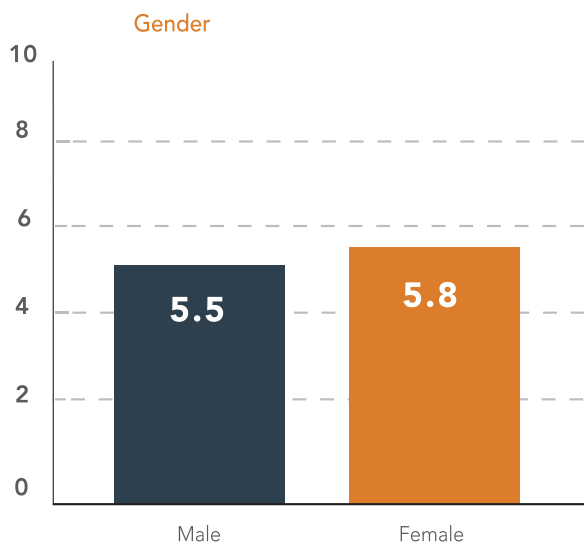


Figure 2: Gender disaggregation of Soviet Nostalgia

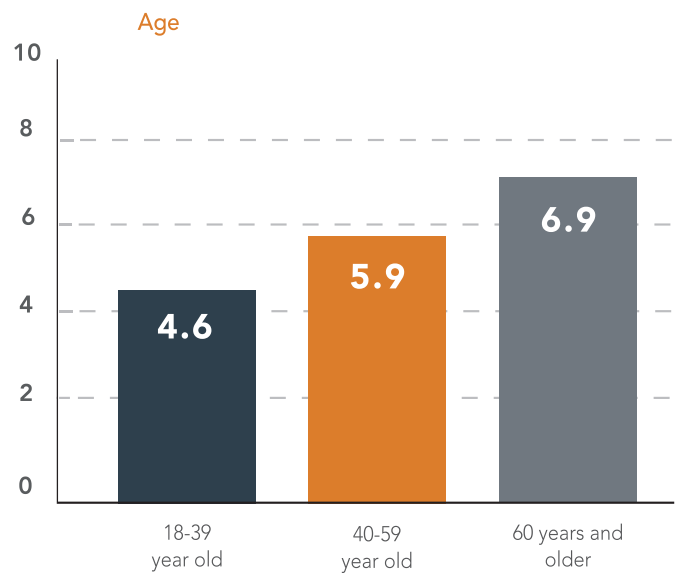


Figure 3: Age disaggregation of Soviet Nostalgia

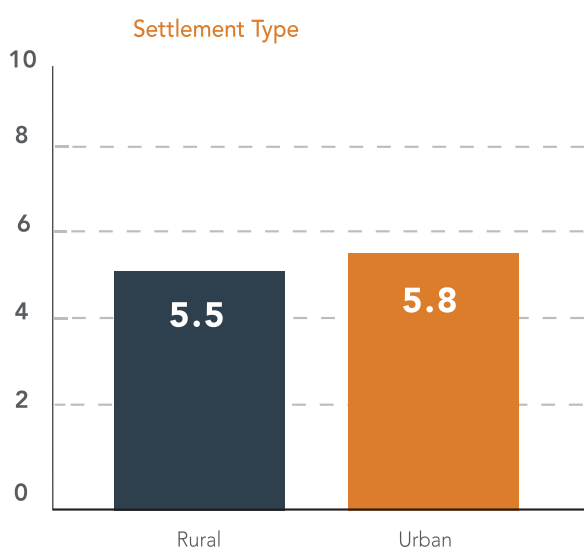


Figure 4: Settlement type disaggregation of Soviet Nostalgia

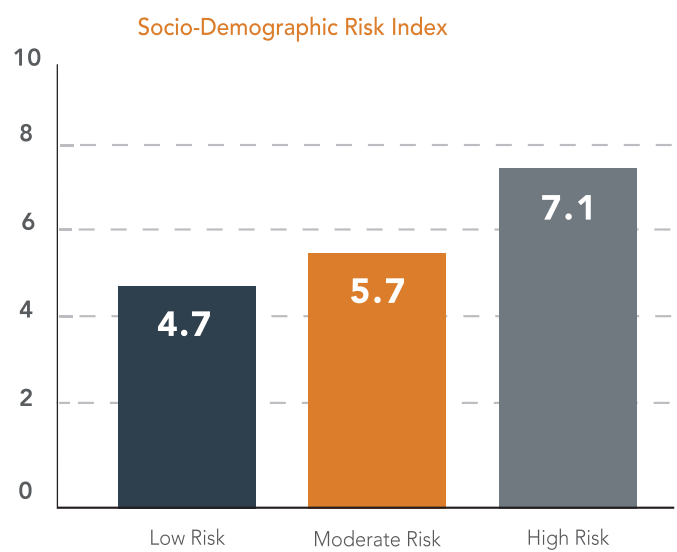


Figure 5: Socio-Demographic Risk Index disaggregation of Soviet Nostalgia

FREQUENCIES: Items unpacked

Each indicator's item can be presented in frequencies, representing how many people respond yes or no to a certain question, for example. We often resort to frequencies when we would like to work with a particular angle of the measured phenomenon.

For example, if your implementing partner is a health organization and you want to have them on board in a campaign to decrease soviet nostalgia, you can check frequencies of such a Soviet Nostalgia item as: 'Was the quality of healthcare better in Soviet times?' (Fig 6)

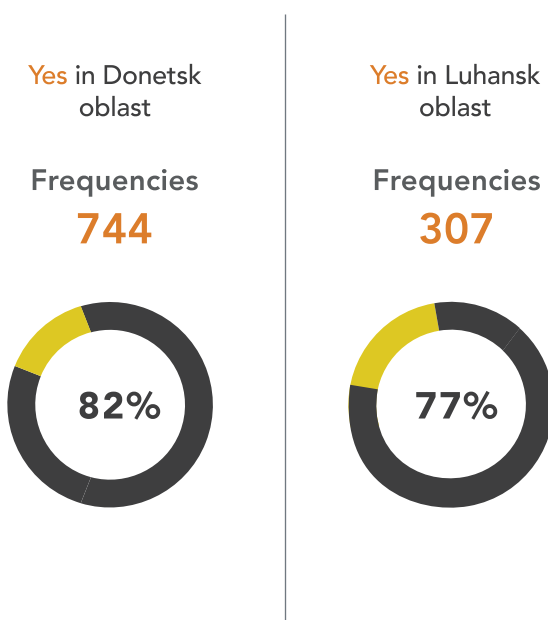


Figure 6: 'Was the quality of healthcare better in Soviet times?'

This breakdown helps to understand: 1) if healthcare system is adding to Soviet nostalgia feeling in your area; 2) which areas should be prioritised (Donetsk oblast in this case) if the resources are limited.

Sometimes to prioritize, we need to look at the frequencies of all items an indicator consists of. For example, the indicator EU benefit measures if people think the EU is beneficial for different sectors in Ukraine. Overall score for the EU benefit in Donetsk and Luhansk oblasts is 4.5, which is much lower than the 5.5 score for the country average. So we know that the perception of the **EU benefit** calls for attention in these oblasts. Thus, we look into detailed frequencies of the EU Benefit items (Fig 7) and identify which sectors are lagging behind the most. If resources are limited, work with companies/entrepreneurs from the 'red' sectors should be prioritized.

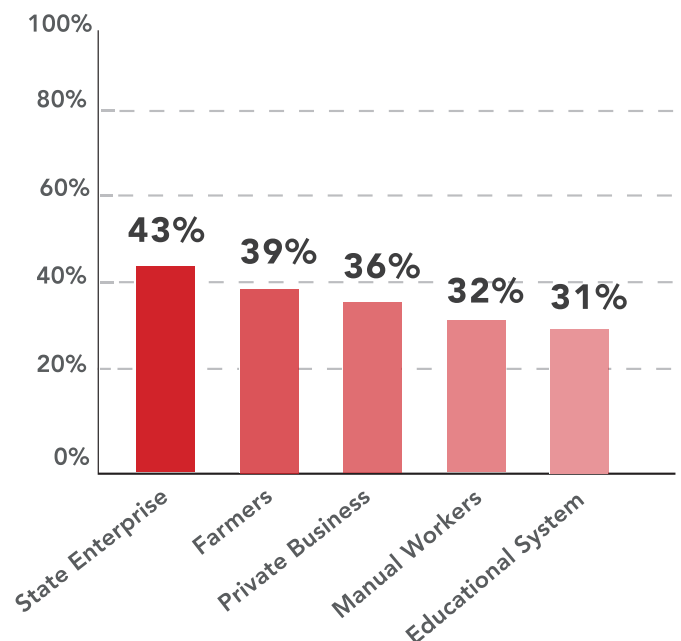


Figure 7: EU Benefit unpacked: 'Which of the following sectors will lose out if Ukraine joins the EU'

Frequencies/percentages give us different information depending on how the question was asked (item wording). For example, unpacking Belief in Human Rights gives us the whole spectrum of opinions. Figure 8 shows which of the rights we asked about people support, tolerate or even consider unnecessary.

BELIEF IN HUMAN RIGHTS

■ Absolutely essential ■ Good but optional ■ Totally unnecessary

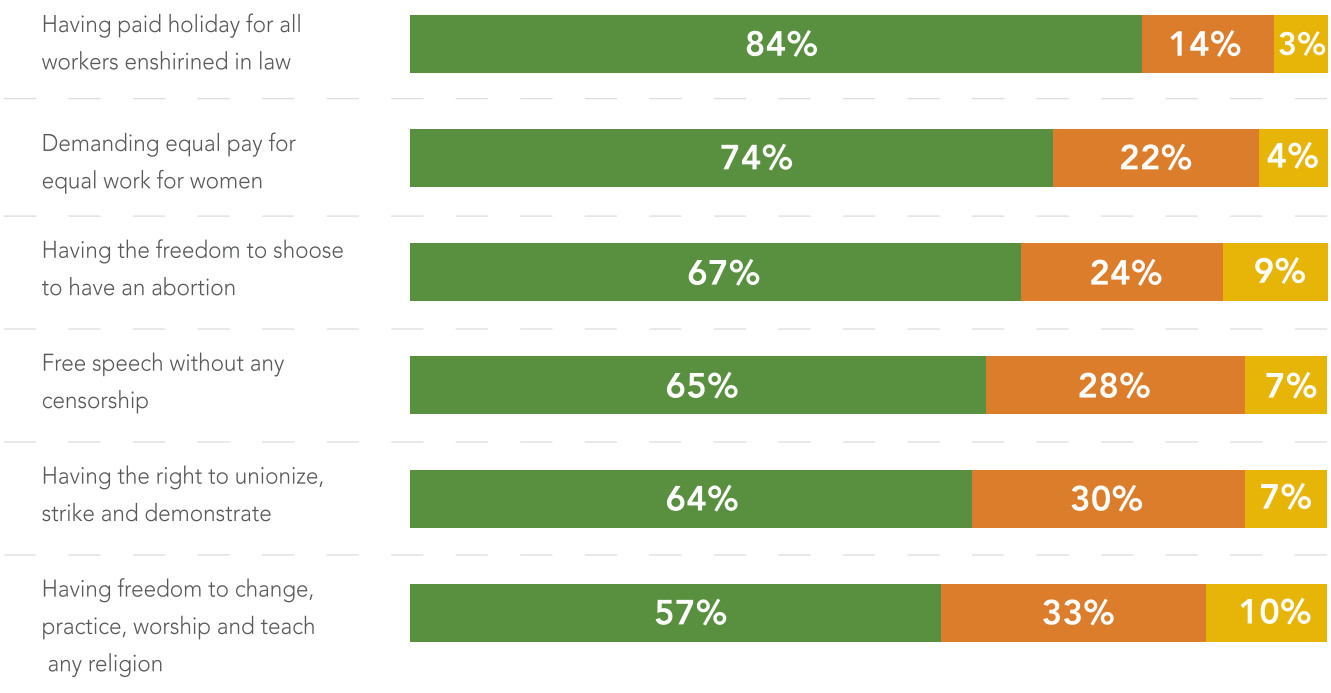


Figure 8: Belief in Human Rights indicator responses in %

What is a heatmap?

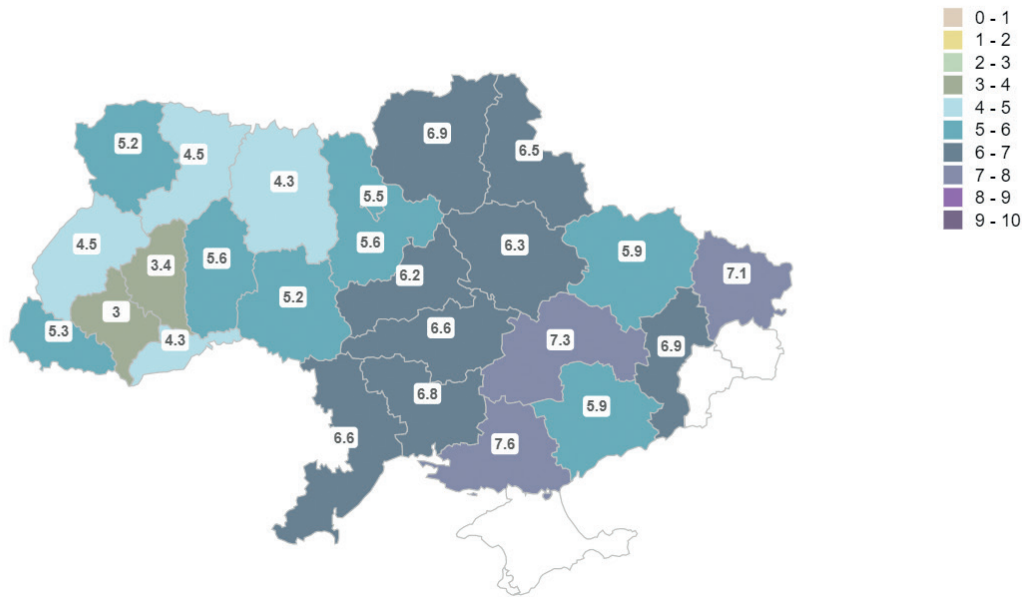
Each indicator we measure can be presented on a heatmap. Heatmaps are regional distributions of an indicator. In Ukraine for example, scores are almost always presented for each oblast. Given the right sample size, they can also be presented at the city level. Heatmaps help prioritize interventions geographically and also to trace general trends.

Heatmap values are those of an indicator, 0-10, where 0 is absence of the phenomenon in society and 10 its maximum presence.

It is important to highlight that we DO NOT consider differences less than 0.5 between scores significant. As a general rule of thumb, we consider these falling within our margin of error.

For example, Soviet Nostalgia heatmaps for 2016 and 2018 (Fig 9) clearly show that Eastern oblasts of Ukraine are more nostalgic than the rest of the country, while Ternopil and Ivano-Frankivsk are the oblasts with the lowest numbers. Thus, while the difference between Luhansk (7.1) and Donetsk (6.9) oblasts is insignificant, the difference between Kharkiv and Donetsk oblasts is very significant. Also, big decline of Soviet Nostalgia is observed in Dnipropetrovsk oblast (decrease of 0.9) and Kherson oblast (decrease of 1.2) oblasts between 2016 and 2018. Knowing this, we can 1) study the reasons behind this decline in Dnipropetrovsk and Kherson oblasts and see if they are replicable elsewhere; and 2) Prioritize interventions for Luhansk oblast.

5.8 Average score for Ukraine 2016
Soviet nostalgia



5.5 Average score for Ukraine 2018
Soviet nostalgia

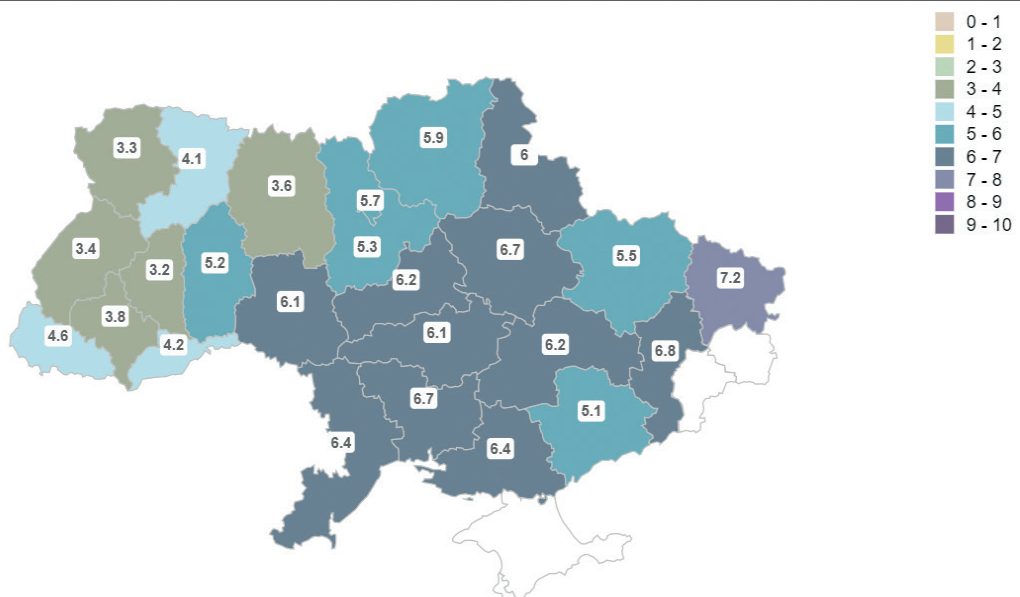


Figure 9: Soviet Nostalgia indicator heatmaps

What is a model?

Models help understand what affects an indicator or what this indicator influences itself. When an indicator is part of a model, we call them **'drivers'**, as they drive (positively or negatively) other indicators they are linked to. In a model, the indicator that all the drivers are influencing and predicting is called an **'outcome'**. Outcomes are at the right end of the model, and they are usually our end goals that we want to influence in the long term. We run models to understand how best to create positive change on an outcome, such as reducing violent tendencies or enhancing inter-group harmony.

Models are usually presented on the SCORE platform, using **red arrows** to show a negative relationship and **blue arrows** representing a positive relationship between indicators. Thicker the arrows, stronger the relationship between the indicators.

For example, in figure 10 the higher "Belief in human rights" is, the lesser people will support separation of temporarily occupied territories. Also, the more connected a society is,

the more human rights are respected. Models should not be confused with correlations, where lines represent associations but they are not directional. In models, the relationships are directional, and the **model should be read from left to right**.

The figure below shows that if we want to strengthen human rights ethos in a community, we should prioritize programs around psychosocial support for citizens (therapies for veterans, campaigns around PTSD, addressing mental health stigma, etc.) and develop skills building social connectedness of communities (community cooperation, communication, trust, etc). The model shows that, it is very important to develop human rights ethos if we aim to build harmony between different groups in society, nurture support for the reforming process and support for the reintegration of Donbas. Looking at the thickness of the lines, we can also see that the impact of human rights is stronger on reintegration and reforms, compared to intergroup harmony.

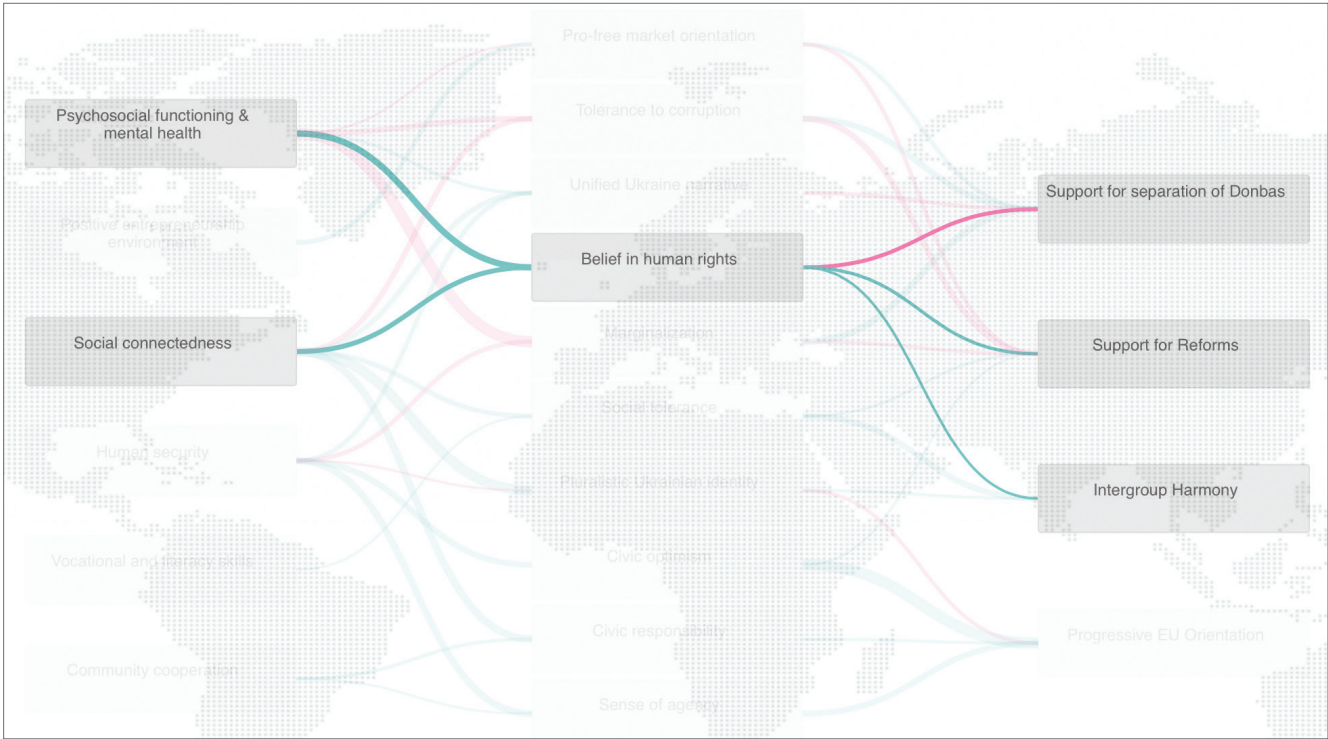


Figure 10: SCORE 2018 predictive model. Belief In Human Rights connections.

Below is another example on how to read SCORE models (Fig 11). Remember that blue arrows mean the relationship is positive and red arrows mean that the relationship is negative.

For example, Trust in institutions is connected to Pro-EU Orientation with a **blue arrow** – this means that if we increase Trust in institutions, we expect to see an **increase** in Pro-EU Orientation. However, Soviet nostalgia is connected to Pro-EU Orientation with a **red arrow** – this means that if we increase Soviet nostalgia, we expect to see a **decrease** in Pro-EU Orientation.

Models allow us to see which pathways lead to positive or negative outcomes. They are very important when planning interventions which aim to reduce or increase certain key indicators. They help us validate our theories of change and allocate resources in areas with the most likelihood of impact.

Models can lead to the following types of conclusions and policy implications:

A model can validate a strategy for reducing or increasing an outcome and estimate which indicators should be prioritised more within that strategy.

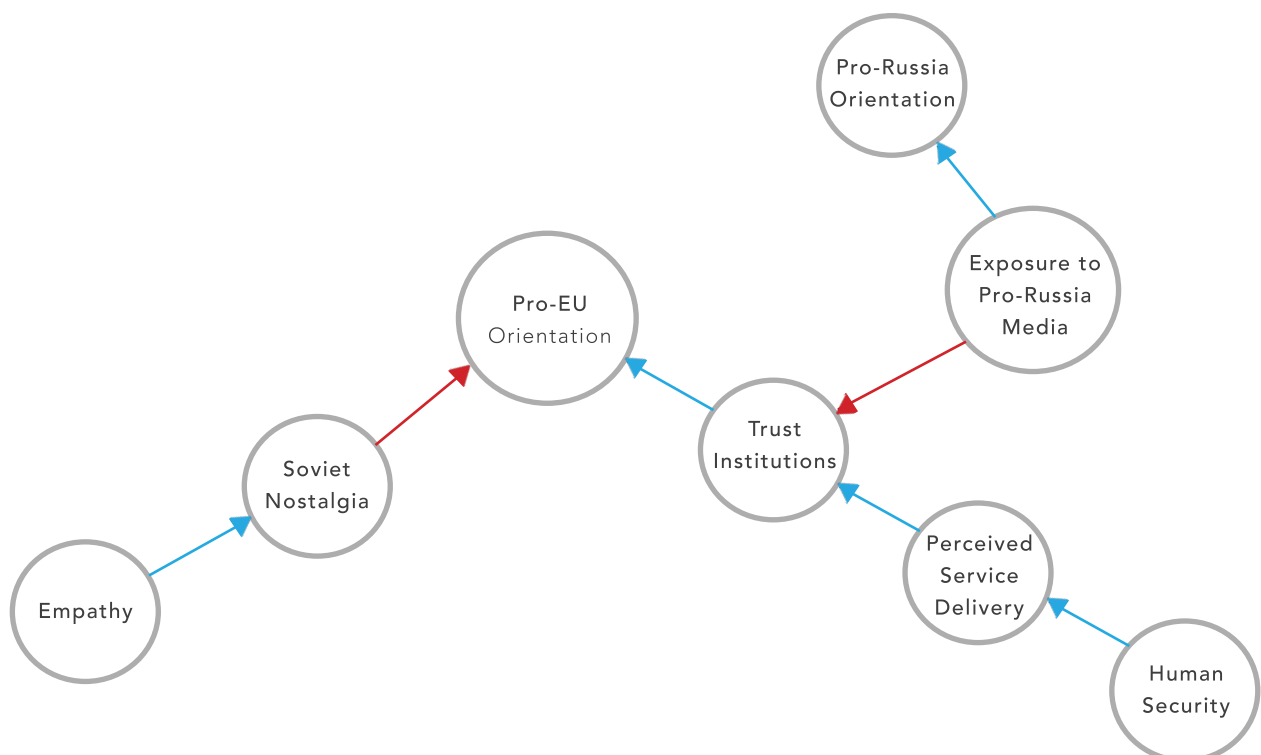


Figure 11: Pro-EU Orientation predictive model for Eastern Ukraine, 2018

What is cluster analysis?

To understand how people are divided vis-a-vis certain indicators we use **cluster analysis**. Cluster analysis puts people into groups based on their scores for specific indicators. After groups are formed, we can see the main characteristics of each group and compare them. Cluster analysis helps to prioritize interventions and understand target audiences.

In the cluster analysis below (Fig 12), we have separated people based on their scores for two indicators: **Soviet Nostalgia in 2016** and **Soviet Nostalgia in 2018**. We discovered four groups:

1. Those with **high** Soviet Nostalgia in both times, we called the **'Steady High'** group
2. Those with **low** Soviet Nostalgia in both times, we called the **'Steady Low'** group
3. Those with **high** Soviet Nostalgia in 2016 but **low** in 2018, we called the **'Decreasing'** group
4. Those with **low** Soviet Nostalgia in 2016 but **high** in 2018, we called the **'Increasing'** group

Steady High

High levels of Soviet Nostalgia in both years

- High Pro-Russia orientation
- Older and more religious
- Higher Support for Peace talks and amnesty
- Higher family connectedness
- Think that authorities not care
- Lower Personal Security

Increasing

Increase in Soviet Nostalgia from 2016 to 2018

- High Pro-Russia orientation
- Higher Support for Peace talks and amnesty
- Think that authorities not care
- Lower Personal Security

Steady Low

Low levels of Soviet Nostalgia in both years

- High Pro-EU orientation
- Better employment status
- Higher social connectedness
- Higher levels of Vident Citizneship Orientation

Decreasing

Decrease in Soviet Nostalgia from 2016 to 2018

- High Pro-EU orientation
- Better income and employment status
- Higher empathy
- Higher social connectedness
- Higher levels of Vident Citizneship Orientation
- Think that authorities care

Figure 12: Soviet Nostalgia groups and their profiles (cluster analysis)

We can now compare the profiles of these four groups. For example, people with Steady High levels of Soviet nostalgia are older and have lower personal security. People in the Steady Low group on average are younger, more likely to be employed, and more socially connected. We also see that the Authorities Care indicator is a common signifier for most of the groups: Soviet nostalgic people do not believe authorities take care of the country, while those not feeling nostalgic are convinced authorities act in the interest of the public. This knowledge, together with indicators of Trust in authorities, can help frame communication strategies about authorities' performance to also simultaneously tackle the feeling of Soviet nostalgia.

Cluster analysis can answer the following types of research questions:

In Ukrainian society, are there groups of people with specific characteristics that we can detect based on two or three key indicators? Can we detect groups with surprising combinations of characteristics?

What are the profiles of each of those groups when considering all other indicators?

² Authorities Care – the degree to which one feels that Ukrainian authorities care for the well-being of all Ukrainian citizens.



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