# Behavioural science and AI tackle global humanitarian challenges



The seventh annual United Nations Behavioral Science Week, held earlier this month, brought together global researchers and practitioners to explore how behavioural science can address pressing humanitarian challenges. This year’s focus included the innovative use of technology to improve outcomes in healthcare, education, and aid distribution, particularly in resource-constrained environments.

A prominent session featured Stanford economist Susan Athey, who showcased an AI-powered intervention at a hospital in Cameroon. There, many women wish to avoid unwanted pregnancies, yet contraceptive usage rates remain low, contributing to high maternal mortality. The hospital used AI-assisted digital tools to support nurses during consultations on contraception, providing personalised recommendations based on individual patient needs. The result was a threefold increase in uptake of long-acting reversible contraception methods such as IUDs and implants. According to the World Health Organization, in Sub-Saharan Africa one in 40 girls aged 15 will eventually die from pregnancy or childbirth-related complications. Athey noted: “AI has the potential to augment humans... Any place where we have a scarcity of human teachers, coaches, service providers, doctors, nurses... AI and digital technology can help make those people more effective.”

In another session, Rebeca Moreno Jimenez, innovation officer and data scientist at the UN Refugee Agency (UNHCR), described the use of agent-based modelling to support displaced populations. This method simulates the likely behaviours of refugees under varying conditions to help policymakers allocate aid more effectively. For example, UNHCR is currently modelling the behaviour of Ukrainians returning to conflict-affected regions, incorporating sociodemographic variables such as family ties and property ownership to assess where and what kind of support will be needed. Similar models have been used to anticipate movements within Somali populations displaced by conflict and climate crisis, as well as to predict COVID-19 transmission in overcrowded refugee camps in Bangladesh. Jimenez emphasised that continuous updating of models with real-time data ensures their accuracy in guiding aid distribution.

The conference also highlighted challenges in deploying AI technologies across different cultural contexts. Linguist Anna Korhonen, co-director of the Centre of Human-Inspired Artificial Intelligence at the University of Cambridge, discussed the importance of behavioural science in designing AI systems that align with diverse social norms and values. She warned that existing AI often struggles to comprehend cultures, motivations, and emotions, leading to “systems that may seem technically very strong, but are actually socially misaligned.”

Michelle Dugas, a behavioural scientist with the World Bank’s Mind, Behavior and Development Unit (eMBeD), presented research on potential biases in AI-powered educational tools. Their study involved using ChatGPT as a digital tutor assigning practice tasks in different languages. When prompted in English, the AI assigned more challenging problems to female students; when prompted in Hindi, the opposite occurred, with male students receiving harder tasks. This raises concerns that, if deployed extensively, such AI tutors might unintentionally reinforce existing educational inequalities—potentially disadvantaging girls in India, where female education rates lag behind males, or boys in countries where women earn more degrees. Korhonen commented, “Without human grounding, AI can still work in many simple and low-risk settings... But it will often fall short in high-stakes areas... especially when we bring it into socially complex contexts.”

The discussions at UN Behavioral Science Week demonstrate how behavioural science and technology intersect to address complex global issues—improving maternal health, optimising refugee aid, and recognising the cultural dimensions necessary for effective AI deployment. The event underscored ongoing innovation as well as the need for interdisciplinary collaboration to ensure these tools meet diverse human needs worldwide.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.uninnovation.network/un-group-pages/behavioural-science> - Corroborates the involvement of UN entities in applying behavioural science for addressing global challenges, which aligns with the themes discussed during the UN Behavioral Science Week.
* <https://www.unbesciweek2023.org/sessions> - Provides details about the sessions and agenda of the 2023 UN Behavioural Science Week, highlighting various applications of behavioural science.
* <https://www.ifad.org/en/w/events/ifad-at-the-un-behavioural-science-week-2023> - Describes IFAD's participation in the UN Behavioural Science Week, focusing on the use of behavioural science in their projects, which supports the event’s themes of innovation and application.
* <https://unpan.un.org/sites/default/files/Events/Events%202024/Concept%20Note%20-%20Behavioural%20Science%20and%20Organisational%20Behaviour.pdf> - Highlights the application of behavioural science within UN organizations and their initiatives, similar to the discussions during the week about internal and external applications.
* <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality> - Supports the statistics mentioned about maternal mortality, particularly in Sub-Saharan Africa, which relates to the session on AI-powered interventions discussed during the event.
* <https://data.unhcr.org/en/country/ukr> - Provides context on the displacement and migration issues in conflict-affected regions like Ukraine, aligning with the discussion on using agent-based modelling to support displaced populations.
* <https://news.google.com/rss/articles/CBMilAFBVV95cUxNOG1lZUFsbzBBNnd5QjBEYWVaMWFoT3M0cklRUktrRF9QV0YyQUdPZm81bnotNEtNdVRZT0xUd3NIVG1oMFh4VHR4R3ZYWi1CbGNXSUZPNXlZQ3lBdi0xUlJYRzlxWDRLYUsyYm5QZDE2cnVYZ1U5RXNCTmZjaWFfY2tUNkE2TFlhM3ROb0k3bVhPcE1i?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data