# How behavioural science and AI are transforming global humanitarian efforts



The seventh annual United Nations Behavioral Science Week, held earlier this month, brought together researchers and practitioners from across the globe to discuss advancements and applications of behavioral science for addressing pressing humanitarian challenges. The event focused particularly on how behavioural insights and technology can enhance initiatives in healthcare, education, refugee support, and global development.

One of the key themes revolves around overcoming limitations in manpower and resources by deploying AI-powered digital assistants. Stanford economist Susan Athey presented a project carried out at a hospital in Cameroon where many women wish to avoid pregnancy but contraceptive use is low. To combat this, nurses were equipped with AI-driven tools that helped structure personalised conversations about contraception based on the patients’ individual needs. This intervention led to a threefold increase in the uptake of long-acting, reversible contraceptives such as IUDs and implants. Athey highlighted the significance of this advancement in regions like Sub-Saharan Africa, where the World Health Organization estimates that one in 40 girls aged 15 will die from pregnancy-related causes. “AI has the potential to augment humans,” Athey explained. “Any place where we have a scarcity of human teachers, coaches, service providers, doctors, nurses, or any place we have a bottleneck from expensive people’s time, AI and digital technology can help make those people more effective.”

Another innovative application presented was the use of agent-based modelling by the UN Refugee Agency (UNHCR) to better predict the needs of refugees returning to their home countries. Innovation officer and data scientist Rebeca Moreno Jimenez described how this technique simulates likely behaviours of displaced populations based on sociodemographic data and other relevant variables. For example, the team is developing models to anticipate the support requirements of refugees returning to Ukraine amid the ongoing conflict with Russia. The data includes factors such as family connections and property ownership, which influence refugees’ destinations and needs upon return. This approach has also been applied to managing COVID-19 transmission risks in overcrowded camps in Bangladesh and tracking internal displacement in Somalia due to climate and conflict. By continuously validating the model predictions against real-time observations, aid agencies can improve the delivery of targeted resources to affected areas.

The conference also addressed the challenges posed by cultural misalignment of AI technologies. Anna Korhonen, co-director of the Centre of Human-Inspired Artificial Intelligence at the University of Cambridge, emphasised that AI systems often fail to account for diverse cultures, motivations, emotions, and social norms. This issue is particularly acute when tools developed using data predominantly from the Global North are deployed in culturally distinct contexts such as the Global South. Michelle Dugas, a behavioural scientist at the World Bank’s Mind, Behavior and Development Unit, presented research revealing gender biases in AI-generated educational support. Their experiment showed that when ChatGPT was prompted in English, female students were assigned more difficult practice problems than males. In contrast, prompting in Hindi resulted in male students receiving more challenging tasks than females. Such disparities raise concerns about the potential for AI tutors to perpetuate or exacerbate existing inequalities—for example, favouring boys over girls in countries where girls already face barriers to education.

Korhonen noted, “Without human grounding, AI can still work in many simple and low-risk settings. But it will often fall short in high-stakes areas like decision-making, policy, and justice, especially when we bring it into socially complex contexts.” The discussions underscored the importance of integrating behavioural science perspectives into the design and deployment of technology for humanitarian and development efforts, ensuring that these tools serve diverse human needs equitably.

The UN Behavioral Science Week continues to serve as a unique platform that connects academic research with practical applications across sectors, promoting innovative solutions to complex global challenges through the lens of behavioural science and technology.

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

## Bibliography

1. <https://www.orfonline.org/expert-speak/ai-in-humanitarian-missions-opportunities-and-challenges> - This article highlights the integration of AI in humanitarian efforts, including its role in augmenting human capabilities, which aligns with Susan Athey's discussion on AI enhancing human effectiveness. It also touches on challenges like cultural misalignment and bias in AI systems.
2. <https://publichealth.jhu.edu/center-for-global-digital-health-innovation/august-2024-digital-tools-transforming-humanitarian-aid> - This source discusses the deployment of digital tools in humanitarian contexts, including AI, and notes the risks associated with algorithmic bias and data privacy, mirroring concerns raised about AI in culturally diverse settings.
3. <https://dexisonline.com/insight/the-promise-and-potential-of-ai-in-humanitarian-assistance/> - This insight explores the potential of AI in humanitarian assistance, highlighting its ability to enhance various humanitarian initiatives, which is consistent with the advancements discussed during the UN Behavioral Science Week.
4. <https://voiceeu.org/publications/artificial-intelligence-disruption-or-opportunity-for-humanitarian-aid-voice-key-highlights.pdf> - This report delves into AI's potential to transform humanitarian aid by enhancing areas like disaster response and education, while also addressing the need for careful management of its challenges, such as privacy concerns and cultural sensitivity.
5. <http://international-review.icrc.org/articles/harnessing-the-potential-of-artificial-intelligence-for-humanitarian-action-919> - This article examines the opportunities and risks of AI in humanitarian action, including the importance of ensuring that AI systems are culturally appropriate, which aligns with the discussions on cultural misalignment at the UN Behavioral Science Week.
6. <https://www.unhcr.org/about-us/innovation/> - While not directly addressing the conference, this UNHCR innovation page highlights the use of advanced technologies, including predictive modeling, to support refugees, which is similar to the agent-based modeling discussed by UNHCR representatives during the event.
7. <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