Department of Risk and Disaster Reduction

UCL

Futures of Risk

Causes | Consequences | Change

Report on the 14th Annual Conference

Held on Tuesday 25 June 2024

14th Annual Conference of the Department of Risk and Disaster Reduction (RDR)

Futures of Risk:

Causes, Consequences, Change

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Preface

This year, Dr Myles Harris organised the 14th Annual Conference of the Department of Risk and Disaster Reduction (RDR). The conference offered an array of sessions that facilitated a deep dive into the future of risks. These sessions were led by academics, research fellows, and students from the department.

The conference was inclusive, inviting students, researchers, practitioners, and policymakers to converge, share insights, and build professional networks. This open format encouraged a diverse exchange of ideas and fostered collaborations across different sectors and disciplines.

Throughout the day, participants engaged in various sessions designed to foster a comprehensive understanding of risk futures. These sessions spanned a wide range of topics, creating valuable opportunities for learning and discussion. The students of RDR played a pivotal role in the conference, presenting their ongoing research through detailed and informative poster sessions (online). This active participation highlighted the department's commitment to integrating student research into broader academic and practical discussions.

Opening Speech

Professor Joanna Faure Walker

Head of the Department of Risk and Disaster Reduction

Professor Joanna Faure Walker inaugurated the conference with a significant announcement: the formal transition of the department from an institute to a full-fledged department. This transition marks a milestone in the department's evolution, reflecting its growing importance and expanded scope within the academic and practical fields of disaster risk reduction.

In her opening address, Professor Joanna outlined the conference's key themes, posing critical questions for the future of the discipline: Will there be paradigmatic shifts or continuity in the future of risks? How can disaster risk reduction (DRR) anticipate and prepare for unforeseen challenges? What collaborative strategies are essential for mitigating and preventing unexpected future risks? These questions set the stage for the conference's discussions, emphasizing the need for innovative and forward-thinking approaches in the field.

She concluded her speech with an inspiring message to the students, underscoring their crucial role in shaping the future of risk and disaster reduction:

"You are the future of this discipline."

Keynote Speech

Ms Paola Albrito, Director of the UN Office for Disaster Risk Reduction

Ms Paola Albrito began her speech by congratulating the RDR on its recent transition from an institute and emphasized the importance of the conference, especially as it precedes the upcoming UN Summit for the Future. This summit is a pivotal event where global leaders will converge to forge a new international consensus on securing a better future by safeguarding the planet and people.

She highlighted the escalating risk of disasters, projecting a 40% increase in annual disasters by 2030. She emphasised that in our interconnected world, wealthier nations cannot isolate themselves from the challenges faced by less fortunate countries. This global connectivity, while heightening the risk of catastrophic disasters, also offers unprecedented opportunities for rapid positive change. Education and research were identified as critical drivers of sustainable development and effective risk management.

A major announcement during her address was the forthcoming Global Assessment Report 2024. This report will offer policy options and recommendations by identifying the underlying causes and drivers of risk. Paola called for adaptable and flexible disaster management systems, incorporating both traditional and innovative technologies, with a strong emphasis on fostering innovation among young people.

She highlighted the necessity of focusing on future generations, acknowledging that the old system no longer works. She emphasised that future strategies need to be evidence-based, with science constituting the backbone of these efforts. "We cannot afford to lose time," Paola declared.

She discussed the collaboration between RDR and UNDRR on the Special Global Assessment Report, which outlines how disasters are the results of societal choices, including perceptions, priorities, and decisions. She illustrated her points with several case studies. A forensic investigation of Tropical Cyclone Freddy, which hit Malawi and Madagascar, highlighted how preparedness actions save lives and livelihoods. Another case study involved the extreme wildfires in Canada in 2023, where Indigenous fire knowledge played a crucial role in reducing wildfire risk and improving biodiversity.

Emphasising the need for evidence-based strategies, Paola called for the acceleration of actions to create a resilient future. She highlighted the importance of forensic analysis and strengthening global agendas like the Sustainable Development Goals (SDGs) and the Paris Agreement. She highlighted the necessity of an adaptable and transformative foresight capacity, including agility, flexibility, the scaling up of new technologies, and the embracing of innovation.

In her closing remarks, Paola urged ongoing collaboration in the disaster reduction agenda, recognizing humanity's dual role as both the cause and solution to climate challenges. She expressed confidence in the innovative contributions of young minds, emphasising that the decisions made today will significantly shape the future.

Panel discussion – What are the futures of risk?

Chair: Prof Ilan Kelman **-** Professor of Disasters and Health jointly appointed between UCL RDR and Institute for Global Health

Panellists:

- Dr Punam Yadav
- Dr Roberto Gentile
- Dr Mohammad Shamsudduha
- Mhari Gordon

Dr Punam Yadav invited the audience to rethink trending concepts, urging them to first consider: whose futures are we talking about? Futures are not a linear process; we all need to reflect on our own epistemological and ontological positions. She called for thinking beyond intersectionality, though it is an important concept, to understand factors of risk other than dynamics of power. Interdisciplinarity has as many challenges as benefits: we may come from different theoretical backgrounds, orientations, and knowledge bases, which makes engagement difficult but worthwhile.

Dr Mohammad Shamsudduha encouraged us to consider the multi-faceted risks surrounding freshwater production. The challenges are current: one-third of the global population lacks access to safely managed drinking water, and half of the global population lacks access to safely managed sanitation, with water quality remaining a major issue in many regions. The challenges are also future-oriented, exacerbated by rapid human development, anthropogenic climate change, geopolitical tensions, and urbanization. We have an environmental and moral imperative to secure a future where everyone has access to safe, reliable drinking water.

Dr Roberto Gentile shared his perspective as a structural engineer turned expert on catastrophe modelling, discussing the future of risk models. He highlighted the likelihood of changes in the frequency, geography, and intensity of hazards (partly due to climate change), as well as in interactions and exposures. Snapshots of the present are not sufficient; there needs to be more research and integration of social vulnerability in models beyond mere disaggregation. The goal of these models is not to predict the future but rather to adopt a "what if" approach that allows us to compute various possibilities.

Mhari Gordon addressed the widely circulated rhetoric surrounding climate change, disasters, and mass migration. In many academic studies, climate change is not found to be the main driver for displacement. Narratives about climate displacement and climate refugees are appealing due to political motives and institutional priorities, but they obscure the uneven impacts on people and groups with differing vulnerabilities. These narratives often fail to acknowledge that refugees and asylum seekers are frequently more at risk in their new environments. Climate change is a risk factor, but it is not the only one – pre-existing vulnerabilities, dynamics of power, legacies of colonialism, and inequalities are often more likely to affect patterns of displacement.

What if we create the future that we want?

RDR student session (debate)

Chair: Abby Ewen - PhD student at UCL Department of Risk and Disaster Reduction

Panellists:

- Professor Maria Kett
- Dr Thaisa Comelli
- Dr Susannah Fisher
- Dr Gianluca Pescaroli

The debate on whether the future will be more resilient revolves around two opposing views. The panel consisted of scholars and professionals with diverse backgrounds, who presented arguments both for and against the notion of a more resilient future.

Arguments Against a More Resilient Future (Group 1):

Increasing Inequality and Exclusion: Professor Maria Kett highlighted that resilience is often a buzzword lacking precise definition. The world is becoming more unequal, with wealth and opportunities concentrated among fewer people. In crises, marginalized groups such as people with disabilities, older adults, and indigenous communities are often left behind. Thus, resilience is not uniformly distributed. Maria also pointed out that the potential benefits of technologies like AI in humanitarian contexts are not equally accessible to all, raising ethical concerns.

Systemic Issues and Political Realities: Susannah Fisher argued that existing political and economic systems are not equipped to handle the escalating hazards posed by climate change and other threats. These systems, dominated by powerful interest groups like fossil fuel companies, resist necessary changes. She emphasized the importance of addressing these systemic issues to build true resilience, noting that simply maintaining the status quo will not suffice.

Challenges of Building Genuine Resilience: Both Maria and Susannah questioned the practicality of measuring and achieving resilience. They suggested that placing the responsibility on individuals and communities might absolve larger entities, like governments and corporations, of their duty to implement structural changes.

Arguments For a More Resilient Future (Group 2):

Knowledge and Technological Advancements: Thaisa Comelli emphasised the significant advancements in knowledge and technology that can enhance resilience. For instance, the increase in comprehensive climate reports and AI-driven early warning systems show potential for better preparedness and response to disasters. Thaisa cited Google's Flood Hub as an example of effective use of AI in providing critical forecasting and mapping tools, potentially aiding millions of people worldwide.

Public Awareness and Engagement: Thaisa also highlighted the rise in public awareness and activism around climate change, exemplified by movements like Fridays for Future and Extinction Rebellion. Increased media coverage and celebrity involvement in climate issues help garner broader public support for resilience-building efforts. She pointed out that such engagement is crucial for implementing effective policies and fostering community action towards resilience.

Policy and Funding Initiatives: Thaisa noted the growing financial commitments and international agreements aimed at tackling climate change and promoting disaster risk reduction. She argued that harnessing these resources effectively could lead to significant improvements in resilience over the next decade.

Evolution and Adaptation: Gianluca Pescaroli reinforced the idea that resilience involves learning from mistakes and continuously improving. He illustrated this with personal anecdotes and historical examples, suggesting that human progress often follows a pattern of setbacks followed by recovery and growth. Gianluca stressed that resilience is about bouncing forward and adapting to new challenges, a process that he believes will lead to a more resilient future.

The debate presented compelling arguments on both sides. Those against a more resilient future focused on systemic inequities and the complexities of genuine resilience-building, while proponents highlighted technological advancements, increased public engagement, and evolving policies and funding as key factors that could drive resilience improvements.

Group 1 won the debate.

In-conversation – David O’Neill MBE & Dr Rozana Himaz

David O’Neill, Chair of Fire Aid and former Strategic Officer at the Fire Brigade, emphasized the importance of building relationships and networks before disaster strikes. Establishing trust and fostering efficient collaboration are crucial for rapid and effective responses, as well as avoiding duplication of efforts. He highlighted the necessity of assembling the right team, one characterized by appropriate skill sets, transparency, mutual honesty, and personal resilience. He noted that teams are often constrained by political factors, including priorities, motivations, and directives, and are not operationally independent.

David proposed several future research areas that could be beneficial. He suggested measuring the impact of international responses to natural hazards against the principle of "do no harm," considering inadvertent harm such as the effects of aid on communities. This could be explored through case studies. Additionally, he proposed investigating the role of social media during the response phase, particularly regarding

intelligence and false alarms, and examining corporate social responsibility in disasters and recovery. Lastly, he highlighted the need to study the impact of donors on setting priorities for response and recovery efforts.

Plenary Panel – What are the opportunities for industry and academia to work together to mitigate future risks?

Chair: Myles Harris – Lecturer, UCL Department of Risk and Disaster Reduction

Panellists (RDR Alumni): Kirsty Johnson, Felicity Schultz-Steinen, Lucy Buck and Timo Baader

Kirsty Johnson: Kirsty graduated from the IRDR (now RDR) in 2019 and now works for the UK Government in risk assessment. She emphasized translating academic knowledge into practical policymaking in resilience and risk management. Her work focuses on understanding various risks, including emerging ones like space weather.

Felicity Schultz-Steinen: Felicity graduated recently and works as an ESG (Environmental, Social, Governance) consultant at Accenture, focusing on sustainability and corporate governance. She highlighted the broad scope of ESG beyond just disaster-related risks. Her IRDR (now RDR) education helped her ask the right questions and apply structured risk analysis in her consultancy work.

Lucy Buck: Lucy graduated in 2015 and has since worked in various roles, including tsunami research and maritime risk. Her career path reflects a focus on environmental risk assessment and disaster resilience. She emphasized the evolving nature of risks, from traditional concerns to emerging global interconnected risks.

Timo Baader: Timo, with a background in crisis management from the army, graduated in 2018 and has since worked in crisis consulting and is now as an independent advisor. He stressed the interdisciplinary approach of IRDR (now RDR), which broadened his perspective on crisis and risk management. Timo highlighted the importance of continuous learning, staying updated, and personal resilience in managing crises effectively.

Each speaker brought a unique perspective shaped by their career trajectory post-IRDR and underscored the evolving nature and interconnectedness of risks in today's world. They also emphasized the importance of collaboration between academia, research, science, and industry to address these complex challenges effectively.

The key points discussed by the panellists:

Collaboration and Communication Across Sectors: There is a recognized need for better collaboration between academia, government, and industry to effectively address risks and increase resilience. Industry can identify emerging issues, government can provide policy frameworks, and academia can offer expertise and research to support these efforts. Current communication and collaboration channels between these sectors are seen as inadequate and need improvement.

Enhancing Risk Literacy in Business Education: There's a significant gap in risk literacy within business education, both at undergraduate and master's levels. The lack of understanding of strategic, joined-up, or disaster risks hampers effective risk management and decision-making in the private sector. There is a call to integrate more comprehensive risk education into business curricula to foster better risk-aware decision-makers.

Practical Application of Academic Concepts: Panellists highlighted the challenge of translating academic theories into practical applications. Academia sometimes focuses excessively on theoretical best practices without adequately addressing practical implementation challenges. Practical exercises and engaging methodologies are suggested as effective tools to bridge this gap and enhance understanding and application in real-world settings.

State Capacity and Pandemic Preparedness: The COVID-19 pandemic underscored deficiencies in state capacity despite perceived preparedness. The discussion highlighted the need to learn from these gaps and improve resilience strategies moving forward. Lessons from the pandemic are expected to shape future policies and investments in resilience and risk management.

Learnings from IRDR (now RDR): Critical thinking and interdisciplinary approaches were identified as the most valuable skills learned from the IRDR (now RDR) program. These skills enable professionals to challenge assumptions, think innovatively, and collaborate effectively across disciplines and sectors. The program's emphasis on diverse perspectives and problem-solving has equipped graduates to address complex challenges in their careers.

Overall, the discussion emphasized the importance of integrating practical insights with academic rigor, enhancing cross-sector collaboration, and improving risk literacy to build more resilient communities and organizations.

Closing address – Professor Joanna Faure-Walker

Professor Joanne Faure Walker closed the 14th annual conference of the department of RDR by emphasising the importance of critical thinking, continuous inquiry, imagination, and adaptability, especially in an age where AI can handle many tasks. She reiterated the conference's key questions: What are the features of future risks? How can we make disaster risk reduction relevant?

She called for ongoing education, genuine collaboration, and active listening across sectors to address real-world issues. She viewed interconnectedness as both a challenge and a solution, offering greater access to information and resources.

She urged everyone to maintain their energy and optimism, inspiring future generations to improve disaster risk reduction. The conference concluded with a call for continued collaboration and innovation.

Scan this QR code to view the online poster gallery of the conference

Scan this QR code to visit the department's website

A Selection of Images from the Conference

Professor Joanna Faure Walker

Mhari Gordon

Dr Mohammad Shamsudduha

Dr Myles Harris

Dr Punam Yadav

Dr Roberto Gentile

Before the inauguration of the conference

A group of audience members at the conference

Panellists of the RDR student session: From the left a) Professor Maria Kett, b) Dr Thaisa Comelli, c) Dr Susannah Fisher and d) Dr Gianluca Pescaroli

Q & A session

Panellists of the plenary panel: From the left a) Kirsty Johnson, b) Felicity Schultz-Steinen, c) Lucy Buck and d) Timo Baader

Professor Joanna Faure Walker during the conference closing remarks

UCL Department of Risk and Disaster Reduction

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Research

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MSc Risk and Disaster Science

MSc Risk, Disaster and Resilience

Research Programmes

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PhD Risk and Disaster Reduction