ISBNPA

Systems Science SIG

WELCOME TO OUR MARCH 2025 NEWSLETTER!

This is the second newsletter of the ISBNPA Systems Science SIG. The Systems Science SIG was created to bring together researchers and professionals interested in systems thinking and approaches. The SIG aims to foster collaboration, share innovative methods, and promote the integration of systems thinking into research and practice. Through this, we aim to advance knowledge and address complex challenges at a global level.

In the March 2025 newsletter:
- General updates and what's coming up in the future
- Flashback to the webinar
- Project in the spotlight
- Recent publications from our community

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GENERAL UPDATES

Systems Evaluation Network webinar on March 20th

The Systems Evaluation Network (SEN) brings together researchers, practitioners, and policy makers to share and critique approaches to evaluating complex public health interventions, particularly those either taking a systems perspective or conceptualised as a systems approach.
On March 20th, a SEN webinar heard Professor Diane Finegood, Dr Koko Zhou, Dr Andrew Brinkley, Dr Rob Southall-Edwards, and Dr Miriam Alvarado focus on "leverage points" in public health systems. The speakers discussed how causal loop

diagrams, and other methods, can help identify areas for policy action and subsequently inform evaluations.
During this meeting the Systems Evaluation Network's LinkedIn group was launched. This group provides a space for SEN members to exchange ideas, methods, tools, and learnings within the fields of public health. SEN recordings and resources will also be shared here. Do you want to join in?

ISBNPA 2025 Conference

We are excited to see you at ISBNPA 2025 in Auckland, New Zealand, from June 11–14! There will be multiple opportunities to exchange knowledge on Systems Science, including:
- At the marketplace gatherings during lunch and refreshment breaks
- An in person social activity alongside other SIGs (more details to follow!)
Join us to connect, collaborate, and explore the latest advancements in the field!

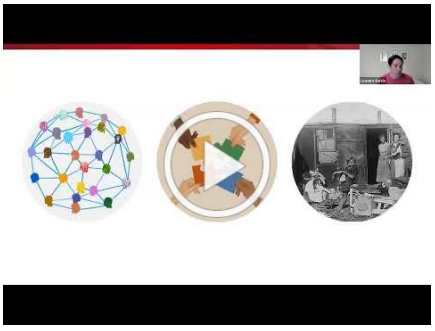
FLASHBACK TO THE WEBINAR

On the 24th March, we organized our first Systems Science SIG webinar: An introduction in systems approaches in public health.

Dr. Leandro Garcia, Senior Lecturer at the Centre for Public Health, Queen's University Belfast, opened the session with a comprehensive introduction to systems approaches in public health. Following Dr. Garcia's introduction, the webinar featured an engaging panel discussion with Prof. Fiona Bull, Head of Physical Activity at the World Health Organization, and Hayley Lever, Chief Executive Officer of Greater Manchester Moving. The discussion touched on key challenges and opportunities in implementing systems approaches, such as language use and collaboration with policymakers. The webinar concluded with an informal discussion about future plans for the SIG.

Thank you to all our speakers and participants for contributing to an insightful and thought-provoking webinar. We look forward to further discussions and developments!

And if you want to catch up on this content, please see the recording below or on the ISBNPA YouTube page.



PROJECT SPOTLIGHT: SALURBAL PROGRAMME

A recent report by the Canadian Academy of Health Sciences (read it here) highlights the role of systems-based approaches in addressing public health challenges. While these

approaches vary widely, they share core principles and emphasize the interconnected nature of health determinants. However, the expert group behind the report identifies key barriers to wider adoption, such as the complexity of systems-thinking terminology, a lack of practical guidance, and limited clear evidence of its added value. They stress the need for new methodologies and interdisciplinary collaboration to fully harness the potential of systems-based public health.

One example of a systems-based approach is the SALURBAL programme, which investigates how urban environments influence health across Latin America. By analyzing data from 371 cities and 1,500 sub-city areas, researchers have identified stark differences in life expectancy—up to 15 years within a single city—driven by social and environmental factors. The programme's work informs policies on urban transport, food systems, and other key determinants of health, demonstrating how data-driven insights can lead to tangible improvements in wellbeing.

Would you like your project in the spotlight?

Contact Eline Meuleman (e.m.meuleman@vu.nl) or Naomi de Pooter (n.depooter@uu.nl).

RECENT PUBLICATIONS

Aguiar, A., Rajah, J. K., Conway-Moore, K., Savona, N., Knai, C., Vlad, I., ... & Kopainsky, B. (2025). Converging perspectives on the processes exacerbating adolescent obesity: an integrative systems approach. Social Science & Medicine, 117706.

Brinkley, A. J., Cusimano, K. M., Freeman, P., Southall-Edwards, R., & Gladwell, V. F. (2025). 'It's about collaboration': a whole-systems approach to understanding and promoting movement in Suffolk. International Journal of Behavioral Nutrition and Physical Activity, 22(1), 7.

Chiu, S. K., Baur, L. A., Occhipinti, J. A., Carrello, J., Golley, R. K., Hayes, A., ... & Freebairn, L. (2025). Insights from a codesigned dynamic modelling study of child and adolescent obesity in Australia. BMJ Public Health, 3(1).

Crielaard, L., Brown, A. D., Nicolaou, M., Hayward, J., Stronks, K., & Allender, S. (2025). Exploring the value Australian community leaders see in a system dynamics model calibrated with local data: social norms and childhood obesity. BMJ open, 15(2), e087195.

Creaser, A., Dowling, L., Helme, Z., Crowther, J., Casana, L., Williams, R., ... & Hall, J. (2025). Adapting ripple effects mapping for evaluating public health initiatives in complex systems: reflections and recommendations from seven case studies. Evaluation, 31(1), 92-110.

Davan Wetton, J., Santilli, M., Gitau, H., Muindi, K., Zimmermann, N., Michie, S., & Davies, M. (2025). Behavioural Systems Mapping of Solid Waste Management in Kisumu, Kenya, to Understand the Role of Behaviour in a Health and Sustainability Problem. Behavioral Sciences, 15(2), 133.

De Pooter, N., Luna Pinzon, A., den Hertog, K., Altenburg, T., Busch, V., Dijkstra, C., ... & Waterlander, W. (2025). Monitoring and adaptation of a system dynamics approach to prevent childhood overweight and obesity: findings from the LIKE programme. Health Research Policy and Systems, 23(1), 30.

Hall, J., Lever, E., Dawkins, N., Young, E., Crowther, J., Williams, R., ... & wider JU: MP team. (2025). Taking a partnership approach to embed physical activity in local policy and practice: a Bradford District case study. International Journal of Behavioral Nutrition and Physical Activity, 22(1), 3.

Heemskerk, D. M., van Stralen, M. M., Piotrowski, J. T., Renders, C. M., & Busch, V.

(2025). Developing a whole systems action plan promoting Dutch adolescents' sleep health. International Journal of Behavioral Nutrition and Physical Activity, 22(1), 33.
Inyang, E., Tweed, E., Pollack, R., Douglas, M., Green, L., Meier, P., ... & Elsenbroich, C. (2025). Developing methods for systems-informed Health Impact Assessment (System-HIA). NIHR Open Research, 5, 11.
Ter Bogt, M. J., Bevelander, K. E., Kramer, E. A., van der Wal, M. M., Molleman, G. R., van den Muijsenbergh, M., & Fransen, G. A. (2024). Mapping the dynamics of learning communities about Dutch healthy weight approaches: a causal loop diagram. Archives of Public Health, 82(1), 238.
Uleman, J. F., Stronks, K., Rutter, H., Arah, O. A., & Rod, N. H. (2024). Mapping complex public health problems with causal loop diagrams. International Journal of Epidemiology, 53(4), dyae091.
Veldhuis, G. A., Smits-Clijsen, E. M., van Waas, R. P. M., Hof, T., Maccatrozzo, V., Rouwette, E. A. J. A., & Kerstholt, J. H. (2025). The influence of causal loop diagrams on systems thinking and information utilization in complex problem-solving. Computers in Human Behavior Reports, 17, 100613.
Veldhuis, G. A., Smits-Clijsen, E. M., & van Waas, R. P. (2024). Techniques to enhance the public policy impact of qualitative system dynamics models. System Dynamics Review, 40(4), e1758.

STAY CONNECTED!

Stay in the loop by following us on LinkedIn, Threads and Instagram.

We (Eline and Naomi) will be responsible for sharing key content in our newsletters. Here's what you can expect in upcoming editions:

- Recent Publications: Get highlights of the latest systems science research articles.
- Project Spotlights: Learn about impactful projects where systems science is applied to real-world health challenges.
- Upcoming Conferences and Events: Stay updated on systems science-focused conferences, webinars, and workshops, including submission deadlines and participation opportunities.

Be updated on all ISBNPA news
Stay tuned at