



## Co-design in preventive mental health research: Advancing evidence, equity, and engagement

Lakshmi Neelakantan <sup>a,b,\*</sup> , Pattie P Gonsalves <sup>c</sup> , Elizabeth M Westrupp <sup>d</sup> 

<sup>a</sup> Population Mental Health Group, Centre for Mental Health and Community Wellbeing, School of Population and Global Health, University of Melbourne, Melbourne, Australia

<sup>b</sup> The ALIVE National Centre for Mental Health Research Translation, Prevention Across the Life Course Research Program, University of Melbourne, Melbourne, Australia

<sup>c</sup> Youth Mental Health Group, Sangath, New Delhi, India

<sup>d</sup> School of Psychology, Deakin University, 1 Gheringhap Street, Geelong, Victoria, Australia

Co-design methodologies, broadly defined as approaches that engage end users in the design, development, and evaluation of programs and services (Slattery et al., 2020), have gained significant prominence in global mental health research, practice, and policy (Bevan Jones et al., 2020; Chinsen et al., 2025; Mulvale et al., 2019; Thabrew et al., 2018; Warraitch et al., 2024). Co-design and related practices such as co-production, co-creation, Patient and Public Involvement (Masterson et al., 2022), are grounded in participatory research principles, including equitable power-sharing, shared decision-making, meaningful engagement with users, valuing lived experience as expertise, and co-ownership of the research process and outcomes (Macaulay, 2016). However, to date, co-design in mental health has been applied predominantly in clinical, treatment, or service-delivery contexts (McCabe et al., 2023; Mulvale et al., 2019), remaining largely downstream of prevention efforts. This special issue aims to extend the field by examining co-design in preventive systems, exploring its application in community, family, and systems-level approaches that aim to prevent mental ill-health before it emerges. It aligns with the evolving prevention literature exploring how co-design can inform effective and scalable universal mental health prevention initiatives, particularly for young people (Carter, 2025; Hetrick & Sharma, 2025). In this editorial, we synthesise the contributions to this issue, examining the diversity of co-design frameworks and methods employed, engagement with equity considerations, and priorities for advancing co-design in prevention research.

The papers in this special issue apply co-design to a wide range of topics relevant to the prevention of mental ill-health. These include: a multi-country, multilingual toolkit to improve awareness and service pathways for children with neurodevelopmental disorders (Pal et al.,

2025); guidance for co-design with youth in universal prevention efforts (Juras et al., 2025); multi-disciplinary community-focused children's wellbeing local hubs (Bibb et al., 2025); a program to support young people with language difficulties (Jackson et al., 2025); outcome measures for children and parents in a feasibility randomised controlled trial of a youth anxiety and depression intervention (Mansoor et al., 2025); mental health literacy and gatekeeper training for graduate teaching assistants in a university setting (Bruce et al., 2025); a training resource to strengthen the wellbeing of moderators of online forums (Glossop et al., 2025); and play-based resources for parents to support children's emotion regulation and family connection (Bufton et al., 2025). Most studies were conducted in high-income countries, such as the UK, Australia, New Zealand, and Canada, with one study originating from low- and middle-income countries (LMICs), namely, India, Nepal, and Sri Lanka. Together, these diverse applications highlight an important shift: co-design is expanding from a tool for service delivery to a critical component of the prevention ecosystem that is focused on addressing structural and social determinants of mental health. Across the issue, authors also reported a rich variety of creative and relational co-design methods that advance prevention research, offering a methodological toolbox for future research. These methods, as well as the contributions to the special issue more broadly, are summarised in Table 1.

The papers in this issue draw on overlapping but distinct theoretical traditions, including experience co-design (Bibb et al., 2025), integrated knowledge translation (Glossop et al., 2025), intervention mapping (Jackson et al., 2025), design mapping (Bufton et al., 2025), youth-led participatory research (Juras et al., 2025), participatory approaches to health promotion (Bruce et al., 2025), human-centred and participatory design (Pal et al., 2025), and approaches combining experience-based

\* Corresponding author at: Population Mental Health Group, Centre for Mental Health and Community Wellbeing, School of Population and Global Health, 207 Bouverie St, University of Melbourne VIC 3010, Australia.

E-mail address: [lakshmi.neelakantan@unimelb.edu.au](mailto:lakshmi.neelakantan@unimelb.edu.au) (L. Neelakantan).

**Table 1**

Overview of contributions to the special issue.

Author (Year)	Aim	Co-design approach	Co-design methods and groups
Pal et al. (2025)	To co-design a community engagement toolkit to improve awareness, early detection, and care pathways for neurodevelopmental delays and disabilities in India, Nepal, and Sri Lanka	Human-centred participatory design that prioritises collaboration between researchers and participants to understand their needs and design solutions that are beneficial in their contexts	Visual and scenario-based workshops; rapid prototyping; interviews; Community Advisory Boards. Co-designers included caregivers, autistic adults, non-specialist health workers, and specialist providers across India, Nepal, and Sri Lanka (n = 185)
Bibb et al. (2025)	To co-design multidisciplinary, community-based child mental health 'Locals' (originally called Mental Health and Wellbeing Hubs) in three Local Government Areas in Melbourne, Australia	Experience Co-Design, adapted from Experience-Based Co-Design, a participatory action research approach where lived experience shapes service touchpoints (i.e., the places where people come in touch with services and systems)	Ideation workshops (journey mapping, Lego™ Serious Play); public creative installations; storyboarding; iterative co-design cycles. Participants included children, families, carers, Aboriginal and Torres Strait Islander communities, Culturally and Linguistically Diverse groups, service providers, and commissioners (>235 co-designers)
Juras et al. (2025)	To develop guidance on co-design for universal mental health prevention with young people primarily in Melbourne, Australia	Youth-led participatory co-design; reflexive framing that explicitly acknowledges limits and trade-offs of participation	Eight online workshops using participatory exercises; personas and scenarios; reflexive thematic analysis. Co-designers were young people aged 16-24 years with diverse backgrounds (n = 21)
Jackson et al. (2025)	Study protocol to co-design a mental health programme for young people with language difficulties in Western Australia	Multi-stakeholder co-design embedded within Intervention Mapping (IM). Co-design aligned with formal programme development stages; IM provides a theory-driven framework that specifies when and how co-design occurs across needs assessment, intervention design, and implementation planning etc.	Surveys, interviews, and workshops using World Café discussions, card-sorting, spheres-of-influence mapping, and action planning. Co-designers will include young people, parents, and professionals
Mansoor et al. (2025)	To co-design outcome measures for a feasibility randomised	Experience-Based Co-Design following Boyd	Youth-parent workshops using Maori facilitation

**Table 1 (continued)**

Author (Year)	Aim	Co-design approach	Co-design methods and groups
	controlled trial of a youth anxiety and depression intervention	et al. six-stage model six-phase model for health co-design involving: engage, plan, explore, develop, decide, and change; culturally grounded participatory approach in which youth and parents co-identified, refined, and prioritised trial outcome measures	practices; prioritisation and refinement of outcomes. Co-designers included young people and parents engaged with services in Aotearoa New Zealand (n = 12)
Bruce et al. (2025)	To co-design a mental health literacy and gatekeeper training programme for graduate teaching assistants	Participatory curriculum co-design framed as a context-specific process to adapt mental health literacy and gatekeeper training to Teaching Assistant roles, informed by settings-based prevention and whole-of-university frameworks (e.g. Okanagan Charter), with an explicit focus on acceptability, feasibility, and risk mitigation.	Whiteboard-based participatory workshops; iterative curriculum refinement. Co-designers included graduate teaching assistants and university staff (n = 67)
Glossop et al. (2025)	To co-design a training resource supporting the wellbeing of online mental health forum moderators	Integrated Knowledge Translation approach, with co-design conceptualised as iterative, collaborative knowledge production between researchers, online forum moderators, users, and service leaders	Sequential digital workshops; needs assessment; prototyping; iterative feedback and pilot testing. Co-designers included paid and volunteer moderators, forum users, public advisors, researchers, and independent facilitators (n = 34)
Bufton et al. (2025)	To co-design play-based resources to support children's emotion regulation and family connection	Three-phase co-design (Understand - Co-develop - Test) informed by human-centred and developmental design principles to translate theory into feasible, engaging, and scalable parenting resources	Online Miro workshops; persona creation; thematic template analysis; rapid prototyping of 30 short video resources. Co-designers included parents from metro, regional, and rural contexts, alongside an interdisciplinary research team (n = 17 for interviews and n = 11 for workshops)

and Māori epistemologies (Mansoor et al., 2025). Yet across this diversity, the papers share a view of co-design as not just a method, but a philosophy of knowledge production: an epistemic stance anchored in lived experience, ethical positioning, reflexivity, and power-sharing. This was reflected in processes such as decision-making by consensus in the core co-design group, comprising of knowledge users, researchers, and facilitators (Glossop et al., 2025), explicit discussion of power and associated frameworks (Juras et al., 2025), and continuous negotiation with community members (Bibb et al., 2025). Reflexivity about the limitations and challenges of co-design was prominent, such as acknowledging potential harms of interventions (Bruce et al., 2025) and the impacts of attrition on participation dynamics and validity of findings (Bufton et al., 2025; Mansoor et al., 2025). More fundamental epistemic and representational constraints also exist, particularly the difficulty of clearly defining lived-experience expertise and the structural challenges of engaging representative publics in universal prevention efforts (Juras et al., 2025). These challenges are especially relevant in prevention efforts, where co-design must inform population-level systems despite being situated in necessarily partial and situated forms of participation.

Almost all studies engaged multiple stakeholder groups, such as service users, youth, parents, carers, practitioners, and researchers, rather than single groups, reflecting the multi-level nature of prevention systems. The involvement of practitioners, such as teachers and moderators, as co-designers of prevention systems, reflects a shift away from their being perceived merely as implementers of researcher-driven interventions. Notably, several authors reported tailoring study design, recruitment, and co-design methods to address inequities in underrepresented populations. For example, Pal et al. (2025) recruited co-designers fluent in local languages (Sinhala, Konkani, and Hindi); Bibb et al. (2025) used targeted outreach to First Nations and Culturally and Linguistically Diverse communities to reflect the users of the hubs; Bufton et al. (2025) reflected on how attrition shaped representational imbalances over time; and Juras et al. (2025) emphasised the need to purposefully include marginalised young people in universal prevention efforts. However, gaps remain. Few studies included underrepresented groups such as fathers, young men, gender-diverse participants, co-designers in LMICs, or policymakers and funders as design partners. Strengthening partnerships with underrepresented communities, particularly those in LMICs, will be essential to embedding equity in both co-design and prevention efforts.

This issue demonstrates the growing sophistication of co-design in prevention research, including its pluralism, creative methods, and reflexivity, while also pointing to critical priorities for the field. Given that co-design has become increasingly embedded within research funding structures, with major funders requiring user involvement throughout the research life cycle (National Institute of Health and Care Research, 2024; Staniszewska et al., 2018), addressing persistent critiques has become more pressing. These include underreporting, inconsistent definitions, limited methodological transparency and rigour, and few evaluations of co-designed interventions (Chinsen et al., 2025; Oliver et al., 2019). Further work is needed not only to use co-design to generate or adapt outcomes and measures - as exemplified by Mansoor et al. (2025) - but to develop measurement frameworks that link co-designed interventions to health and wellbeing indicators across individual, family, and community levels, as argued for by Bibb et al. (2025).

At the same time, emerging commentaries call for a “science of participation” that clarifies when lived-experience expertise is most critical, how it shapes the research process, and what forms of knowledge it produces (Singh et al., 2025). This is particularly relevant for co-design, which is highly heterogeneous, and makes explicit epistemic claims about whose knowledge matters, how problems are framed, and what outcomes are valued, particularly when lived experience is positioned as a form of expertise. In this context, the core claims of co-design therefore require careful specification, reflexivity, and accountability to

mature into a science of participation. Collectively, this special issue demonstrates that prevention research, practice, and policy can be designed with individuals and communities in a rigorous, ethical, and equitable way. Advancing the field will now require greater conceptual and methodological precision, improved reporting, and evaluative approaches capable of capturing both the outcomes of co-designed interventions and the epistemic work that co-design itself performs.

## Funding

This editorial did not receive any funding.

## Author contributions

EW conceived the idea for the special issue. LN, EW, and PPG jointly developed the concept and scope of the special issue. LN conceptualised and drafted the editorial, with EW and PPG providing critical input, refinement, and feedback. All authors reviewed and approved the final version of the manuscript.

## CRediT authorship contribution statement

**Lakshmi Neelakantan:** Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Pattie P Gonsalves:** Writing – review & editing, Methodology, Formal analysis, Data curation, Conceptualization. **Elizabeth M Westrupp:** Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Data curation, Conceptualization.

## Declaration of competing interest

On behalf of all authors, the corresponding author states that there is no conflict of interest.

## Acknowledgements

The authors acknowledge and thank the contributors to this Special Issue for their thoughtful, innovative, and inspiring scholarship.

## References

- Bevan Jones, R., Stallard, P., Agha, S. S., Rice, S., Werner-Seidler, A., Stasiak, K., Kahn, J., Simpson, S. A., Alvarez-Jimenez, M., Rice, F., Evans, R., & Merry, S. (2020). Practitioner review: Co-design of digital mental health technologies with children and young people. *Journal of Child Psychology and Psychiatry*, 61(8), 928–940. <https://doi.org/10.1111/jcpp.13258>
- Bibb, J., Dimopoulos-Bick, T., McMahon, K., Tjung, C., Orcher (Muruwori | Gumbaygirr), P., & Palmer, V. J. (2025). The co-design of a children's health and wellbeing Local model of care to embed early mental health intervention and prevention within community ecosystems. *Mental Health & Prevention*, 40, Article 200457. <https://doi.org/10.1016/j.mhp.2025.200457>
- Bruce, E., Halladay, J., Pathiranawasam, S., & Munn, C. (2025). Co-designing and evaluating the acceptability of a mental health literacy training program for graduate teaching assistants on a university campus. *Mental Health & Prevention*, 39, Article 200433. <https://doi.org/10.1016/j.mhp.2025.200433>
- Bufton, K., Bates, M., Hamid, J., & Westrupp, E. (2025). Co-designing an active play parenting program to support emotion regulation in early childhood: Presenting user personas and program concepts. *Mental Health & Prevention*, 40, Article 200448. <https://doi.org/10.1016/j.mhp.2025.200448>
- Carter, E. (2025). Debate: Where to next for universal school-based mental health interventions? The value of student voices in informing the design and implementation of universal school-based mental health interventions. *Child and Adolescent Mental Health*, 30(1), 96–98. <https://doi.org/10.1111/camh.12750>
- Chinsen, A., Berg, A., Nielsen, S., Trewella, K., Cronin, T. J., Pace, C. C., Pang, K. C., & Tollit, M. A. (2025). Co-design methodologies to develop mental health interventions with young people: A systematic review. *The Lancet Child & Adolescent Health*, 9(6), 413–425. [https://doi.org/10.1016/S2352-4642\(25\)00063-X](https://doi.org/10.1016/S2352-4642(25)00063-X)
- Glossop, Z., Jones, S., Ahmed, S., Caton, N., Collins, G., Haines, J., Jackson, K., Lodge, C., Machin, K., Marshall, P., Pilgrim, S., Rayson, P., Robinson, H., Salisbury, L., Shryane, N., Staff, J., Stevenson, J., Vega, L., Walsh, A., ... Lobban, F. (2025). Co-design of moderator training: Integrating knowledge from forum moderators, users

and researchers with the improving peer online forums (iPOF) project. *Mental Health & Prevention*, 38, Article 200428. <https://doi.org/10.1016/j.mhp.2025.200428>

Hetrick, S., & Sharma, V. (2025). Debate: Where to next for universal school-based mental health interventions? Can research led by young people shape universal solutions for mental health and suicide prevention in school settings? *Child and Adolescent Mental Health*. <https://doi.org/10.1111/camh.12754>. n/a(n/a).

Jackson, E., Hill, E., Jones, K., Leitao, S., Tonta, K., Myers, B., Sowerbutts, A., Townsend, J., Nayton, M., Baker, J., & Boyes, M. (2025). Study protocol for the co-design of a mental health program for young people with language difficulties. *Mental Health & Prevention*, 38, Article 200424. <https://doi.org/10.1016/j.mhp.2025.200424>

Juras, A., Reavley, N., Mehr, M. A., Wang, S., Nguyen, T. D., Santosa, S., Tran, D. B., Gui, W., Dumuid, S., Phung, S., Antony, E. S., Turner, A., & Neelakantan, L. (2025). No co-design process can ever truly cater to every single person": Perspectives of young people in Australia on co-design for the prevention of mental health challenges. *Mental Health & Prevention*, 38, Article 200414. <https://doi.org/10.1016/j.mhp.2025.200414>

Macaulay, A. C. (2016). Participatory research: What is the history? Has the purpose changed? *Family Practice*, cmw117. <https://doi.org/10.1093/fampra/cmw117>

Mansoor, Z., Bell, E., Stanley, J., Buchanan, M., & Fortune, S. (2025). What matters most to young people and families receiving mental health treatment? A co-design approach to inform outcomes in a randomised control trial of Tuning in to Teens. *Mental Health & Prevention*, 38, Article 200422. <https://doi.org/10.1016/j.mhp.2025.200422>

Masterson, D., Areskoug Josefsson, K., Robert, G., Nylander, E., & Kjellström, S. (2022). Mapping definitions of co-production and co-design in health and social care: A systematic scoping review providing lessons for the future. *Health Expectations*, 25 (3), 902–913. <https://doi.org/10.1111/hex.13470>

McCabe, E., Amarbayan, M. (Megan), Rabi, S., Mendoza, J., Naqvi, S. F., Thapa Bajgain, K., Zwicker, J. D., & Santana, M. (2023). Youth engagement in mental health research: A systematic review. *Health Expectations*, 26(1), 30–50. <https://doi.org/10.1111/hex.13650>

Mulvale, G., Moll, S., Miatello, A., Murray-Leung, L., Rogerson, K., & Sassi, R. B. (2019). Co-designing services for youth with mental health issues: novel elicitation approaches. *International Journal of Qualitative Methods*, 18, Article 1609406918816244. <https://doi.org/10.1177/1609406918816244>

National Institute of Health and Care Research. (2024). Renewing the NIHR's commitment to public partnerships. <https://www.nihr.ac.uk/news/renewing-nihrs-commitment-public-partnerships>.

Oliver, K., Kothari, A., & Mays, N. (2019). The dark side of coproduction: Do the costs outweigh the benefits for health research? *Health Research Policy and Systems*, 17(1), 33. <https://doi.org/10.1186/s12961-019-0432-3>

Pal, S., Malhotra, B., Gonsalves, F. D., Mutaher, A., Hansamalee, C., Bajracharya, S., Gadtaula, S., Rajapaksha, Y., Hewavithanagamage, S., Thebuwana, V. S., Haggipola Archchi, R., Abesingha, N., Neupane, S., Fernandes, J., Saini, D., Deshpande, R., Mathur, G., Prakash, A., Suneja, P., ... Divan, G. (2025). Co-designing a community engagement toolkit to raise awareness of screening and care for neurodevelopmental delays and disabilities in India, Nepal, and Sri Lanka. *Mental Health & Prevention*, 38, Article 200431. <https://doi.org/10.1016/j.mhp.2025.200431>

Singh, I., Viding, E., Spencer, L., Austin, C., Kokan, Z. R., & Stringaris, A. (2025). The need for a science of patient and public involvement and participation in child and adolescent mental health research. *Nature Mental Health*, 3(11), 1311–1317. <https://doi.org/10.1038/s44220-025-00497-1>

Slattery, P., Saeri, A. K., & Bragge, P. (2020). Research co-design in health: A rapid overview of reviews. *Health Research Policy and Systems*, 18(1), 17. <https://doi.org/10.1186/s12961-020-0528-9>

Staniszewska, S., Denegri, S., Matthews, R., & Minogue, V. (2018). Reviewing progress in public involvement in NIHR research: Developing and implementing a new vision for the future. *BMJ Open*, 8(7), Article e017124. <https://doi.org/10.1136/bmjopen-2017-017124>

Thabrew, H., Fleming, T., Hetrick, S., & Merry, S. (2018). Co-design of eHealth interventions with children and young people. *Frontiers in Psychiatry*, 9. <https://www.frontiersin.org/articles/10.3389/fpsyg.2018.00481>.

Warraitch, A., Lee, M., Bruce, D., Curran, P., Khraisha, Q., Wacker, C., Hernon, J., & Hadfield, K. (2024). An umbrella review of reviews on challenges to meaningful adolescent involvement in health research. *Health Expectations*, 27(1), Article e13980. <https://doi.org/10.1111/hex.13980>