



OCAD University Open Research Repository

Faculty of Design

2014

Now and then: Co-designing systems smart enough for the future

Hollingshead, Matthew and Vink, Josina

Suggested citation:

Hollingshead, Matthew and Vink, Josina (2014) Now and then: Co-designing systems smart enough for the future. In: Proceedings of RSD3, Third Symposium of Relating Systems Thinking to Design, 15-17 Oct 2014, Oslo, Norway. Available at <http://openresearch.ocadu.ca/id/eprint/2066/>

Open Research is a publicly accessible, curated repository for the preservation and dissemination of scholarly and creative output of the OCAD University community. Material in Open Research is open access and made available via the consent of the author and/or rights holder on a non-exclusive basis.

Now and Then: Co-Designing Systems Smart Enough For the Future

Prepared by: Matthew Hollingshead and Josina Vink, Centre for Addiction and Mental Health
Informed by: Jill Shakespeare, Mairi Omand, Antoine Derose and all the members of the Northwest Toronto Service Collaborative

Introduction

Human beings tend to create systems that address needs in ways that make sense at a specific time and under specific circumstances. Systems are typically built to last, but the question must be asked: what impacts do systems have as the circumstances under which they were created change? For mental health service systems, outdated ideas and approaches often become harmful or irrelevant to the people they are intended to support. In the face of this challenge, mental health systems must be redesigned to be less harmful, more relevant, and more responsive to the changing needs of people and communities who should benefit from their support.

This paper uses the case example of the Northwest Toronto Service Collaborative, a cross-sectoral partnership between service providers, youth, and families to implement systems change aimed at improving the appropriateness of supports for children and youth with mental health and addictions needs in Northwest Toronto. Grounded in this example, the paper will demonstrate how an adapted version of the Viable Systems Model (based on Hodgson, 2010) can be applied to promote the emergence of a resilient community mental health system that responds to the changing needs of those it serves.

A (Very) Brief History of Mental Health Systems

In order to properly understand the current state of mental health service systems, it is important to understand the historical legacies that previous systems have left behind. Figure 1 provides a brief overview of how approaches to mental health issues in Europe and North America have changed over the last 200 years (Canadian Centre for Policy Alternatives, 2007; Hulchanski, 2007; Kirby, 2006).

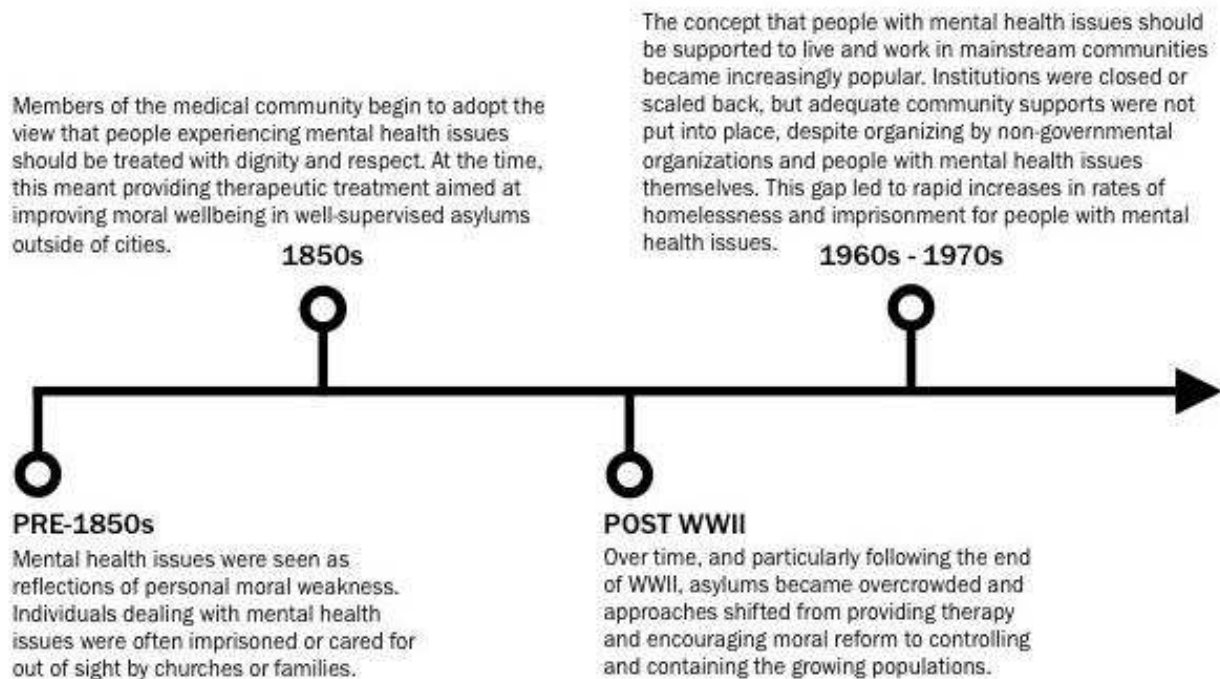


Figure 1: A Timeline of Changing Approaches to Addressing Mental Issues

Although philosophies and care approaches have changed over time, one constant factor has been that professionals and experts have tended to continuously develop mental health services and systems that ‘do’ onto people rather than working with them as experts in their own care. The layering of these historical mental health systems has left behind a legacy of harmful treatment for people seeking to access support. For example, in Toronto, mental health services are typically accessed through contact with police officers, child protection workers, or hospital emergency rooms. Many people find that these pathways add additional traumas to the already difficult experience of having a mental health crisis. Furthermore, services haven’t kept pace with the increasing cultural diversity that characterizes Toronto, resulting in a lack of relevance for people who do not fit the white, Anglophone image of the Canadian mainstream.

Ontario’s Response

For the past twenty-five years, successive reports from Ontario’s provincial governments have identified the need for better system coordination in mental health and addictions services. The release of the “Open Minds, Healthy Minds” report in 2011 created a platform for a ten year, comprehensive mental health and addictions strategy for Ontario, laying the ground work for systems thinking and cross-sectoral collaboration. The Centre for Addiction and Mental Health (CAMH) in Toronto is sponsoring one of the twenty-two initiatives outlined in the strategy, called ‘Systems Improvement through Service Collaboratives’ (SISC) (Ontario Ministry of Health and Long-term Care, 2011). This initiative is supported by six ministries of the Ontario Government.

The SISC initiative consists of eighteen Service Collaboratives located in communities across Ontario. A Service Collaborative is a group of service agencies and individuals who work together to identify and address system gaps in a local community to better support individuals with mental health and addictions needs. Together, stakeholders work through a community-driven, action-oriented process guided by Implementation Science (IS) frameworks (Betram, Blase, & Fixsen, 2013) that provide an evidence-based structure for exploration, purposeful selection, clarification, improvement, and

systematic implementation of change. The Service Collaborative process also embeds developmental evaluation, use of evidence, quality improvement, sustainability strategies, and the pursuit of health equity goals.

Case Example: The Northwest Toronto Service Collaborative

Working within this context, the process and experience of the Northwest Toronto Service Collaborative (NWT SC) offers important insights and discoveries about emerging systemic design practices. The NWT SC brings together service providers in Northwest Toronto from health care, education, justice, community services, and cultural services, along with youth and families, to design and implement mental health and addictions systems change.

The population of Northwest Toronto is extremely diverse. Over 50% of people living there speak a first language other than English, close to 50% of its residents identify as members of a visible minority group, and over 50% of its residents have immigrated to Canada (City of Toronto, 2011). The Northwest Toronto community is also extremely polarized. It is home to gross income inequalities, with high concentrations of low-income households living in large apartment towers (United Way Toronto, 2011). Many neighborhoods in the area are also severely under resourced, with inadequate access to public transit and social services.

Figure 2 depicts the process followed by the NWT SC from problem identification to implementation.



Figure 2: Overview of the NWT SC Process

Since Fall of 2013, the NWT SC has completed the following steps:

1. Collectively identified a problem (lack of appropriateness of services and social isolation)
2. Co-designed a solution (the Peer Positive initiative that helps organizations partner with individuals with lived experience in the design, delivery, and review of services).
3. Planned for installation and implementation (Peer Positive training, coaching, evaluation, and a community of practice is in development)

Implementation Science also highlights the importance of continuously considering the sustainability of the intervention being developed. However, the lessons learned from the history of legacy mental health systems demonstrates that sustaining services and systems as contexts change around them

can cause unnecessary harm in the future. What was needed was a way to ensure the Peer Positive initiative and related systems are resilient and respond to changes in the context. A framework that offers valuable direction for building this system resilience and adaptation was found in Anthony Hodgson's adaptation of the Viable System Model (2010).

The Viable Systems Model

Hodgson's Viable System Model demonstrates how the relationships between five inter-related capacities combine to nurture social systems that are resilient and responsive to the broader contexts in which they are embedded (2010). These capacities resonated strongly with members of the NWT SC and are seen as focal points for capacity building efforts.

Figure 3 illustrates an adapted version of the Viable Systems Model used by the Northwest Toronto Service Collaborative.

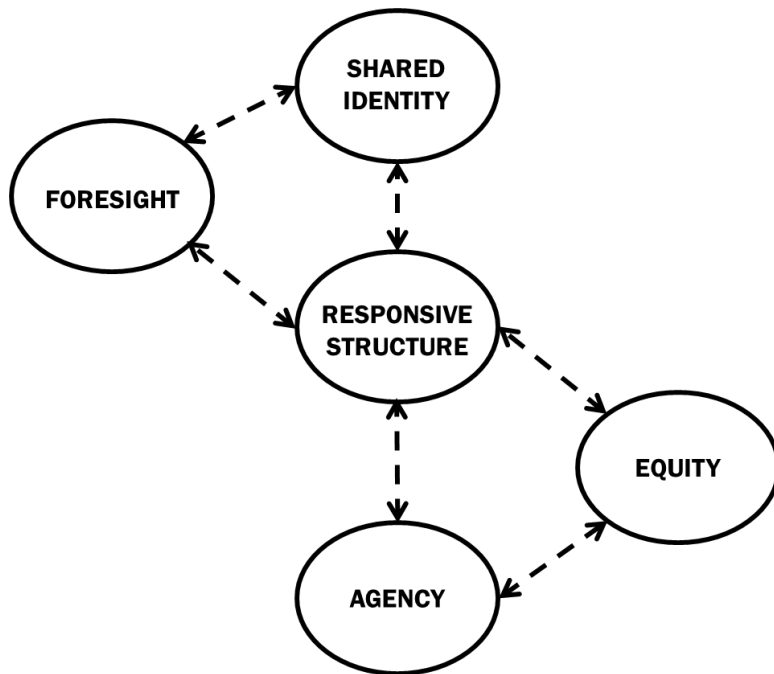


Figure 3: Viable Systems Model Adapted by NWT SC

Table 1 provides an overview of each capacity and related challenges in the NWT SC's process.

CAPACITY	EXPLANATION	CHALLENGES
AGENCY	A community has the skills and resources necessary to manage its needs and build capacities.	Community members may not feel as though they have the ability to use the skills they have, or the time and support to develop the skills they need.
EQUITY	A community is able to acknowledge different positions of power and privilege, and encourages good outcomes for all.	Building an equitable community requires more than just 'bringing diverse people together'. It involves addressing inequitable power dynamics and integrating strategies to challenge oppression throughout the process.
RESPONSIVE STRUCTURE	A community has formal and informal social structures that promote abilities to participate, listen, link ideas, and lead by bridging individual goals with a common purpose.	Ongoing efforts need to be made to balance the interests of the few with the common purpose and ensure that individual perspectives collectively inform regular direction setting.
FORESIGHT	A community acts to anticipate the future and develops appropriate responses.	Social service providers tend to exist in a state of moving from crisis-to-crisis. Taking the time to regularly plan for the long-term future is not always a feature of professional cultures.
SHARED IDENTITY	A community shares common values and a common understanding of the many ways it is connected with 'the system.'	It takes time, patience, and tangible successes to build the trust necessary for people from different backgrounds and experiences to feel a sense of shared identity.

Table 1: The Five Capacities of the Viable Systems Model

The interrelationships between each capacity in this model are of critical importance – if one capacity is weakened or impaired it limits the effectiveness and resilience of the system as a whole. For example, if the Peer Positive initiative does not acknowledge the ways that traditional mental health services have tended not to engage people with lived experience in the design, delivery, and review of services (equity), then the perspectives of people with lived experience are less likely to be taken into consideration when planning for the future (foresight), which will compromise the ability of those involved in the Peer Positive initiative to make decisions that adequately address the needs and issues of service users (responsive structure).

Conclusion

As governments, intermediaries, social services and designers work to improve and re-design legacy social systems, it is imperative that capacity is built to support system resilience and adaptation, rather than simply intervention sustainability. The Viable Systems Model seems to offer a hopeful framework to guide new and existing Services Collaboratives and other system networks in building system resilience. The Northwest Toronto Service Collaborative and Peer Positive initiative will continue to inform how this model might be used through its ongoing implementation efforts.

References

- Baeck, P., Hampson, M., & Langford, Nesta (2013). For us, by us: The power of co-design and co-delivery. People Powered Health Series. London, UK. Retrieved from: http://www.nesta.org.uk/sites/default/files/the_power_of_co-design_and_co-delivery.pdf
- Binder, T., Brandt, E., & Gregory, J. (2008). Design participation(-s) – a creative commons for ongoing change. *CoDesign: International Journal of CoCreation in Design and the Arts*, 4:2, 79-83. Retrieved from: <http://www.tandfonline.com/doi/pdf/10.1080/15710880802114458>
- Binder, T., Brandt, E., & Sanders, E. (2010). A framework for organizing the tools and techniques of participatory design. Retrieved from: <http://www.maketools.com/articles-papers/PDC2010ExploratoryFrameworkFinal.pdf>
- Betram, R., Blase, K., & Fixsen, D (2013). Improving programs and outcomes: implementation frameworks 2013. Retrieved from: http://www.uh.edu/socialwork/news/events/05292012-bridging%20the%20gap%202013/Bertram-Blase-Fixsen_Improving%20Programs%20and%20Outcomes%20Implementation%20Frameworks_2013.pdf
- Canadian Centre for Policy Alternatives. (2007). *The Rich and the Rest of Us: The changing face of Canada's growing gap*. Toronto, ON: Yalnizyan, A.
- City of Toronto (2011). Area B – North York. Community Council Profiles. Retrieved from: http://www1.toronto.ca/City%20Of%20Toronto/City%20Planning/Wards/Files/pdf/C/CCA_NNY%20Census%20Profile%202011.pdf
- Dyer, G. (2002). Y3K: Beyond systems design as we know it. Open University. Cambridge, UK. Retrieved from: <http://www.afscet.asso.fr/resSystemica/Crete02/Dyer.pdf>
- Ebrahimi, M. (2010). *Deinstitutionalization and Community Inclusion of Individuals with Intellectual Disabilities in Ontario: A Case Analysis*. Unpublished master's thesis, Brock University, St. Catharines, Canada.
- Freire, K. & Sangiorgi, D. (n.d.) *Service design & healthcare innovation: from consumption to co-production and co-creation*. Retrieved from: http://www.academia.edu/628119/SERVICE_DESIGN_and_HEALTHCARE_INNOVATION_from_consumption_to_coproduction_and_co-creation
- Gray, D. & Vander Wal T. (2012). *The Connected Company*. O'Reilly Media.
- Hodgson, A. (2010). *Transformative Resilience: A Response to the Adaptive Imperative*. Investigations of the International Futures Forum. Carnegie UK Trust. Retrieved from: <http://www.decisionintegrity.co.uk/DIL%20Transformative%20Resilience%20-%20Hodgson.pdf>
- Holling, C. S., Gunderson, L., and Ludwig, D. (2002). *Panarchy: Understanding Transformations in Human and Natural Systems*. Island Press, Washington, D.C.
- Hulchanski, D. Cities Centre, University of Toronto. (2007). *The Three Cities within Toronto: Income Polarization among Toronto's Neighbourhoods, 1970-2005*. Toronto, ON.

Kirby, M.J.L., & Keon, W.J. The Standing Senate Committee on Social Affairs, Science and Technology. (2006). *Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada*. Ottawa, ON.

Logan, R. & Van Alstyne, G. (n.d.). *Designing for emergence and innovation: Redesigning design*. University of Toronto. Retrieved from:
<http://www.physics.utoronto.ca/people/homepages/logan/VanAlstyneLoganFinal.pdf>

Murphy, B. (2000). *On the Street: How we created the homeless*. J.G Shillingford.

Ontario Ministry of Health and Long-Term Care. (2011) *Open Minds, Healthy Minds: Ontario's Comprehensive Mental Health and Addictions Strategy*. Toronto, ON.

Sanders, E. & Stappers, P. (2008). *Co-creation and the new landscapes of design*. CoDesign. Taylor & Francis. Retrieved from: http://www.maketools.com/articles-papers/CoCreation_Sanders_Stappers_08_preprint.pdf

United Way (2010). *Poverty By Postal Code 2: Vertical Poverty*. Retrieved from:
<http://www.unitedwaytoronto.com/document.doc?id=89>

Quinn Patton, M., Westley, F., & Zimmerman, B. (2006). *Getting to maybe: how the world is changed*. Random House Canada.