

RECOVERY CAPITALS (RECAP): APPLYING A COMMUNITY CAPITALS FRAMEWORK TO DISASTER RECOVERY

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TABLE OF CONTENTS

ACKNOWLEDGMENTS	4
EXECUTIVE SUMMARY	5
END-USER PROJECT IMPACT STATEMENT	6
INTRODUCTION	7
BACKGROUND	8
Core project & potential outcomes	8
RESEARCH APPROACH & PROGRESS	9
1. Recovery guidance	9
2. Equity, inclusivity and Residential mobility	12
KEY MILESTONES	13
UTILISATION AND IMPACT	14
Summary	14
Guide to Post-Disaster Recovery Capitals (ReCap)	14
NEXT STEPS	16
PUBLICATIONS LIST	17
Presentations	17
Other	18
TEAM MEMBERS	19
Core ReCap team	19
Academic collaborators	19
End-user and stakeholder organisations	20
REFERENCES	21



ACKNOWLEDGMENTS

Some of the documentation in this report includes background information from the original project agreement which was generated by staff from the BNHCRC and previous project leads from the University of New England and Massey University. This material has been retained because it reflects the project origins and framing.

The ReCap project has drawn upon relevant data and findings from the Beyond Bushfires study and related research conducted by the University of Melbourne, Australia; on Resilient Wellington and related research conducted by Massey University, New Zealand; and other relevant disaster recovery research. The authors gratefully acknowledge the specific contributions of Professor Daniel Aldrich (Northeastern University, USA), Dr Melissa Parsons (University of New England, Australia), Professor Mehmet Ulubasoglu & Farah Beani (Deakin University, Australia) and the conceptual contributions of all academic, end-user organisations and other stakeholder partners including Australian Red Cross, Leadbeater Group, Victoria State Emergency Service, Country Fire Authority, University of Melbourne Department of Social Work, Wellington Region Emergency Management Office, New Zealand Red Cross, Fire and Emergency New Zealand, Phoenix Australia, Social Recovery Reference Group, Australian Department of Home Affairs, Department of Primary Industries and Regions South Australia, Emergency Management Victoria, Resilient Melbourne, Creative Recovery Network, and Regional Arts Victoria.



EXECUTIVE SUMMARY

The Recovery Capitals (ReCap) project applies a Community Capitals lens to disaster recovery to increase understanding about the interacting influences of social, built, financial, political, human, cultural and natural capital on wellbeing outcomes. It aims to support wellbeing after disasters by providing evidence-based guidance through a range of resources in different formats to accommodate different learning styles and ways of working.

ReCap has shown marked progress in the past year by engaging a large team of end-user and stakeholder organisations who are actively involved in progressive decision making. Detailed evidence mapping against the community capitals framework was undertaken using previous research conducted by the academic teams and collaborators. The first ReCap resource, a booklet containing key messages in an accessible format will be released as a pilot in July 2020 to meet the demand for support in current recovery efforts. The remaining ReCap resources will be produced and released later in 2020.



END-USER PROJECT IMPACT STATEMENT

John Richardson, *Australian Red Cross*

The project has progressed very well, with the engagement of a significant number of stakeholders across both Australia and Aotearoa New Zealand, and across a range of sectors. The adoption of the capitals approach represents an advance in the thinking that started nearly a decade a half ago with the development of the recovery environments approach, which recognised there were cross overs between different domains of a recovery community. What the capitals approach helps us do is further understand the complexity and interrelatedness of impacts and recovery actions. With the 2020 that Australia is experiencing, it is timely that the resources developed will help recovery managers across the two countries, many whom are thrust into roles with a basic or no understanding of recovery, take into consideration the interrelatedness of different elements of recovery. This guidance has already been used in Red Cross' Guidance for Pandemic Recovery, and references are being made to the project and the resources in recovery webinars.



INTRODUCTION

Since the advent of the Hyogo Framework for Action (HFA) in 2005, nations have been prioritising investments in more targeted preparedness, relief and mitigation policies in an attempt to reduce the financial and human costs of disasters. Regardless of the effectiveness of the response during the event, the recovery process is complex, multidimensional and continues over an extended period of time. However, rarely is there a concerted long-term dimension for plans particularly from the perspective of enabling disaster impacted communities to direct the recovery goals and processes.

Reconstruction policies frequently focus on the restoration of the built environment with little attention to the restoration of social assets and community networks. However, disaster recovery is more than simply rebuilding infrastructure and assets or providing welfare and rehabilitation. Recovery is about providing opportunities to further social, cultural and economic systems as well as natural and built environments. To do this though, it must be recognised that people and communities have complex and interrelated needs which have to be understood, respected and addressed. It is important that people, communities, organisations and government agencies play complementary roles in this process and understand the interrelations between the social, cultural, human, political and the natural, financial and built environment. The manner in which recovery activities are planned and undertaken is critical and can require appropriate enablers to be present to optimise the effectiveness of any recovery intervention. Conversely some activities fail to reach their potential due to the presence of various barriers. There is a need to be able to assess and understand the enablers and barriers present within a recovering community so as to ensure that the appropriate actions are taken at the right time.

Further, there is a significant deficit in knowledge and understanding of the demographic issues influencing temporary displacements, relocation and migration, and resettlement after disasters. Post disaster movement occurs after every major disaster. Many disaster-prone places are bound to reproduce their long-established settlement patterns, but the demographic characteristics of residents often change. Studies in Indonesia after the 2004 Tsunami and post Hurricane Katrina in the USA, show significant differences in the make-up of the community and fundamental changes of demography, families, marriages, birth, social psychology and social conventions creating a transformation of these communities. Understanding more about how these changes occur and how they matter will provide valuable insight into guiding long-term recovery processes that are culturally response and inclusive, and improve the resilience of communities.



BACKGROUND

CORE PROJECT & POTENTIAL OUTCOMES

ReCap aims to promote wellbeing after disasters by producing an evidence-based package of resources to help guide development of recovery strategies that are culturally responsive and socially inclusive and customised to community contexts. The last year of the project will concentrate on utilisation actions that will be developed with end-users as the project progresses.

The resources will be incorporated into the operations of the ReCap end-users as a regular guide to recovery planning and will be shared through their networks and operations to support communities affected by current and future disasters in Australia and Aotearoa New Zealand.

UTILISATION FUNDING

Additional utilisation funding of \$222,000 for the production of the ReCap resources was approved, with support letters from end-users confirming that these funds would be matched by \$1,160,700 in-kind contributions. The associated activities and deliverables are included within this report.



RESEARCH APPROACH & PROGRESS

ReCap focuses on promoting the long-term recovery of communities after a disaster. Firstly, the University of Melbourne is leading an examination of the evidence base for recovery risk and protective factors using the Community Capitals Framework (Emery and Flora 2006). Secondly, Massey University is leading the examination of equity and inclusive strategies, which also encompasses work that explores key literature from Aotearoa and Australia in the field of disaster mobility.

1. RECOVERY GUIDANCE

This area of research looks at multiple forms of capital (natural, built, political, cultural, human, social, financial), their interconnectedness and interactions in disaster recovery. Examination of these recovery capitals through existing evidence and datasets, and working with end users, has identified what has worked well in recovering communities as well as potential areas for improvements. Through this process we aim to provide a guide and related resources for the planning of recovery activities in different community contexts.

ReCap framework

The complexity of disaster recovery processes is well established. Over a decade ago, an attempt was made to recognise the interlinked nature of recovery, through the establishment of the recovery environments approach. However, recovery efforts remained siloed, with little attention paid to the multifaceted and diverse layers which collectively constitute recovery efforts.

As efforts to develop integrated understandings of the many factors involved in disaster recovery continue, 'capitals' approaches have emerged in recent years in the field of disaster recovery. Capitals are generally understood to be assets or resources that can generate additional resources¹. Capitals frameworks can therefore be useful in understanding how different factors relate to each other², and how resources can be drawn upon to achieve desired outcomes. One of the many capitals approaches which has in recent years been applied in the disaster resilience literature^{3,4} is the Community Capitals Framework (CCF), originally outlined by Emery & Flora¹ in the context of community development. It consists of seven capitals – social, cultural, natural, built, political, financial and human.

Taking the CCF as a starting point, we developed an adapted version in collaboration with end-users, which we have used as the basis for the evidence mapping and resource development. In adapting the CCF for the ReCap project, we defined the seven capitals broadly to represent the rich and diverse groups of people and communities that experience disaster recovery. Each capital allows for the fluidity of meanings and relationships both with other capitals and people and communities. Drawing from Bronfenbrenner's socioecological model⁵, ReCap represents the wide range of types and scales of the disasters, which intersect with various systems and infrastructures at the local, regional and national level. The model also recognises that disaster



recovery happens over time, and as such the interactions and effects of each capital change. In this way, each phase of the disaster cycle (prevention, preparedness, response and recovery) also interacts and influences how recovery is experienced and enacted. ReCap promotes practices of social equity and cultural diversity in recognition that disasters affect people disproportionately. People and communities have complex and interrelated needs which should be understood, respected and addressed.

Evidence mapping

The ReCap project draws on relevant data and findings from the Beyond Bushfires study and related research conducted by the University of Melbourne; on Resilient Wellington and related research conducted by Massey University; and other relevant disaster recovery research conducted by the study investigators and academic collaborators, subject to co-authorship and data sharing protocols. The new collaborations with Professor Aldrich, Northeastern University and Professor Mehmet Ulubasoglu and Farah Beani from Deakin University have increased our capacity to address the different forms of community capital in our research and translation processes. We have specifically sought out evidence relating to key topics such as Indigenous peoples' recovery experiences, and for the Australian part of the work we have drawn particularly upon work led by Bhiemie Williamson at Australian National University.

Evidence has been mapped against an adapted version of the Community Capitals Framework, with care taken to ensure it:

- provides adequate coverage across the different forms of capital
- presents clear messages while also conveying the complexity of the research findings
- identifies the intersections between the different forms of capitals in a disaster recovery environment
- identifies, where possible, the differential applications of the findings for diverse individuals and population groups in different life circumstances.

Resources

The ReCap resources will draw on the evidence about risk and protective factors to provide guidance for action, and they will show the interplay between different aspects of recovery. They will be designed to be easy to read and understand. They will be produced in different formats, recognising that people have different ways of accessing information in a busy workplace – some will prefer online material, others will prefer something they can listen to as they drive to a disaster affected site, others will keep a pamphlet with key messages or a detailed booklet on hand. A detailed ReCap Resource Plan has been developed with the end-users at joint workshops and follow up meetings. The end-users stated they are most likely to use resources that start with simple core messages, backed up by additional evidence and then more detailed guidance. They will be designed to accommodate diverse population groups, community contexts and hazard events.



Given the recovery efforts and demands in 2020, it was agreed that the primary resources providing key messages for each of the Recovery Capitals would be prepared for early release (at the beginning of July 2020), and the different formats would be developed after that (e.g. website, podcasts, booklets, video).

In developing this first resource, we have crafted key messages based on the evidence mapping, outlining the role of each of the community capitals in disaster recovery, including how it can affect wellbeing and influence other community capitals. Statements of 'what we know' summarise academic evidence, but they do not represent the entire evidence base. They are accompanied by prompts for those involved in disaster recovery to consider when applying this knowledge to their own work.

This content has been developed into a printed booklet and digital PDF, designed by Alana Pirrone with illustrations by Oslo Davis. The structure of the resource highlights the interrelatedness of the community capitals in recovery.

Collaboration

End-user engagement

The annual workshop held in August 2019 demonstrated a high degree of stakeholder engagement in ReCap. It was a very productive workshop which focussed on the nature and format of useful resources from the perspective of our end-users. This subsequently informed a plan for a series of complementary tangible and online resources to share our evidence-based findings. End-user support and commitments of in-kind contributions to ReCap resource piloting and development have since supported additional funding for resources which fell outside of the original project agreement.

Draft versions of the booklet have been presented to end users in recent months, with very positive feedback. End users have provided valuable suggested changes from end users to the content and design which have been incorporated into the final pilot booklet to be released in July 2020.

Trans-Tasman connections

Massey University team members visited Australia in August 2019 to participate in the workshop, and University of Melbourne team members visited Aotearoa New Zealand in February 2020 as guests of Massey University to engage with disaster commemoration and training activities, learn more about the Aotearoa New Zealand disaster and cultural context to inform the development of ReCap resources, and connect with local end-users. These visits have enhanced the links with key agencies within and across the two countries. In addition, the different perspectives brought by the teams from the two countries have enabled knowledge sharing, robust critical discussions and deeper understandings of similarities and differences, all of which have informed ReCap outputs.



2. EQUITY, INCLUSIVITY AND RESIDENTIAL MOBILITY

Massey University is leading work that explores how equity and inclusivity influence wellbeing outcomes during recovery. They are also exploring literature on residential mobility in Aotearoa and Australia and how that might influence the likelihood of dissolving social ties. In researching relevant literature they are considering 1) Why people move 2) How their history of mobility plays out in a disaster situation? 3) How does it affect the social capital of the community that is left behind? 4) How does it impact on the social capital of the community that is moved into? 5) What can we learn from this in order to increase the social capital in these communities, since we know that connectedness plays a big part in social recovery after disaster? This work builds on experiences in Aotearoa New Zealand and ongoing research around the recovery pathways of impacted communities. The work will be disseminated through an academic article which is now in draft stages.



KEY MILESTONES

The key milestones for this project since commencement of the new academic leads, are outlined in Table 1.

Community consultations on draft ReCap framework have commenced but have been partly delayed by pandemic restrictions. This will be a focus in the next quarter.

Milestone	Date	Status
Annual workshop	30 Sep 2018	Completed
Initial evidence mapping using Beyond Bushfires data	31 Dec 2018	Completed
Detailed evidence mapping including NZ & Aldrich research	31 Mar 2019	Completed
Targeted analyses to address evidence gaps (UOM – financial capital/Massey – cultural capital)	30 Jun 2019	Completed
Targeted analyses to address evidence gaps (UOM – political capital/Massey – residential mobility)	30 Sep 2019	Completed
Annual workshop – present synthesis of evidence and draft framework	31 Oct 2019	Completed
End-user consultations on draft ReCap framework– Australia and NZ	31 Mar 2020	Completed
Preparation of content & design for resources [Utilisation]	30 Jun 2020	Completed
Community consultations on draft ReCap framework – Australia and NZ	30 Jun 2020	Commenced
Production of resources [Utilisation]	30 Sep 2020	commenced
Test application of ReCap Framework in disaster-affected communities in Australia & NZ	30 Sep 2020	Pending
Piloting of resources [Utilisation]	31 Dec 2020	Pending
Further analyses to address any gaps in ReCap Framework	31 Dec 2020	Pending
Refinement of resources [Utilisation]	31 Mar 2021	Pending
Finalisation of ReCap Framework to suit different hazards, contexts and population groups	31 Mar 2021	Pending
Implementation of knowledge translation plan to disseminate findings and resources for different end users and stakeholders	30 Jun 2021	Pending
Dissemination of resources [Utilisation]	30 Jun 2021	Pending
Submission of academic papers	30 Jun 2021	Pending



UTILISATION AND IMPACT

SUMMARY

The focus of the ReCap project so far has been on the development of the research components of the project, and the production of a high level pilot resource as the first project output. Utilisation and impact of this pilot resource, along with the remaining outputs, will be reported on in future annual reports.

GUIDE TO POST-DISASTER RECOVERY CAPITALS (RECAP) PILOT | AUSTRALIAN EDITION

Output Description

This resource has been developed through the Recovery Capitals (ReCap) project, which aims to support wellbeing after disasters by providing evidence-based guidance.

It emphasises the interacting elements of recovery, using a framework of 'community capitals' – natural, social, financial, cultural, political, built and human.

This booklet will form part of a range of resources in different formats. It has been created through an Australia-Aotearoa New Zealand collaboration, and there will be an edition tailored to each country, although both will have broader relevance to other locations. This first edition is designed for use in Australia.

For each of the seven community capitals, there is a section outlining its role in disaster recovery, including how it can affect wellbeing and influence other community capitals.

The community capitals are deeply interrelated, so you will find information relevant to each capital throughout the document. Icons after each statement of 'what we know' illustrate some of the links revealed in the underlying evidence base.

The statements of 'what we know' summarise academic evidence, but they do not represent the entire evidence base. They are accompanied by prompts for those involved in disaster recovery to consider when applying this knowledge to their own work.

Available (along with all future Australian ReCap resources) via www.redcross.org.au/recap.

Extent of Use

- The resource will be released for piloting in July 2020, so the extent of use remains to be seen. It will be disseminated to end-users via email, social media, traditional media, through partner networks and also available publicly through the Australian Red Cross website. Hard copies of the booklet will also be printed and made available to end-user organisations.



- We will have agreed strategies for monitoring the pilot to assess the feasibility, appropriateness and usefulness of the resources.
- The resource has been highlighted as a tool for use by recovery planners in Red Cross' *Guidance Note for Recovery Planning for Pandemic*.
- The project has also been featured in the Australian Institute of Disaster Recovery's Recovery Matters webinar series.
- The project and resource have also been featured in presentations on recovery to Monash University Masters Of Supply Chain students
- It has been distributed to Red Cross' Bushfire recovery team, working across NSW, Victoria, South Australia and Queensland.

Utilisation Potential

- There is strong interest from the end-users in the booklet, as indicated in the support letters. There is also interest from other agencies dealing with 2020/2021 bushfire recovery and so we are considering a wider public release even during the pilot phase to support recovery efforts.

Utilisation Impact

- This will be reported on in future reports



NEXT STEPS

The ReCap project is still in progress. The pilot booklet (Australian edition) will be released in July 2020 and distributed to end-users who have agreed to actively trial it in their work with disaster affected communities and provide feedback about feasibility, appropriateness and usefulness.

Adaptation of this resource for audiences in Aotearoa New Zealand is underway. This will include translation into te reo Māori, and modifications to the English version to ensure cultural appropriateness. It will also include Māori designed and inspired artwork.

In the meantime, we will continue to develop the remaining ReCap resources, based on the mapping of the evidence we have conducted, and incorporating additional evidence as required. The final package of resources may include:

- Postcards to alert and link recovery workers and community members to the online resources
- Online material at different levels of complexity for different audiences (primarily recovery workers and community members)
- Multi-fold pamphlets to provide a simple overview of key recovery considerations to increase understanding for community members
- Videos of individual stories to provide insights about recovery for community members, reflecting the diversity of experiences
- Podcasts with disaster recovery experts to clarify for recovery workers how the evidence can be applied in the field
- Powerpoint slides to assist end-user and community organisations with decision making about recovery strategies

We will also continue to seek external expertise to identify ways in which the resources will need to be adjusted to align with Indigenous perspectives and to be appropriate for diverse and marginalised groups.

Future planned activities also include: a virtual workshop with end-users in the second half of 2020, conference presentations, and publications including a BNHCRC hazard note and two peer-reviewed papers.



PUBLICATIONS LIST

The ReCap project has developed a number of outputs related to primary and aligned research activities.

1. **Blake D**, Becker J, Hodgetts D, Hope A. (2020). The 2016 Kaikōura Earthquake: Experiences of safety, evacuation and return for apartment dwellers in Te Whanganui-a-Tara, Aotearoa New Zealand. *International Perspectives in Psychology: Research, Practice, Consultation*. Under review.
2. Cubrinovskia, M., Bradley, B., Elwood, K. J., **Johnston, D.**, Orchiston, C., Sullivan, T., Wotherspoon, L.M., (in press) Wellington's Earthquake Resilience: Lessons from the 2016 Kaikōura Earthquake. *Earthquake Spectra*
3. Ripley, S., Kaiser, L.H., **Campbell, E.**, Shadwell, J., **Johnston, D.** M. and Neely, D. (2020). Engaging stakeholders in pre-event recovery planning: utilising a recovery capitals framework. *The Australian Journal of Emergency Management*.
4. **Johnston, D.M.**, Vinnell, L.J., Wallis, A., Coomer, M.A., McClure, J., Becker, J.S., Gunnell, S. (2020). A bibliography of social research on the earthquake risk in Wellington, Aotearoa New Zealand: 1848 to 2019. *Disaster Research Science Report; 2020/02*, Wellington (NZ): Massey University. 49 p.
5. **Johnston, D** and Becker J. (Compilers) (2020 under review). 2010-2011 Canterbury Earthquakes Social Research Bibliography (Version 1). *Disaster Research Science Report; 2020/03*, Wellington (NZ): Massey University. 26 p
6. **Gibbs L**, Peeters A. Where do we go next with prevention? Adopting a transilient approach as we learn from coronavirus. In. *Life and Health Re-imagined: Paper 5*. Melbourne, Victoria: VicHealth; 2020.
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8. Newnham E, Reifels L, **Gibbs L**. Disaster Mental Health Research. In *WHO guidance on research methods for health emergency and disaster risk management*. (Eds) Mike Clarke, Virginia Murray, Emily Chan, Ryoma Kayano, Jonathan Abrahams, and Tracey O'Sullivan (In press)

PRESENTATIONS

A series of presentations relating to the ReCap project have been delivered to date:

- Gibbs, L. 'Recovery Capitals'. AFAC research forum, 24th September 2019, Hobart.



- Gibbs, L. 'Long-term recovery from the 2009 Black Saturday bushfires'. University of Canterbury, Christchurch, 20th February 2020.
- Gibbs, L. 'Long-term impact of the 2009 bushfires on children'. *Special open meeting of the Te Runaka ki Otautahi o Kai Tahu, 21st February, Christchurch.*
- Gibbs, L. 'Living beyond bushfires: an Australian case study'. Disaster Management and Public Health Summer School, University of Otago, 24th February 2020, Wellington.
- Gibbs, L and Quinn, P. '2019/2020 Season Bushfires – Same But Different?' *Bushfire Recovery Victoria webinar, 16th July 2020.*

OTHER

1. Gibbs, L. Witness Statement in the matter of the Royal Commission into National Natural Disaster Arrangements. 22 May 2020. Melbourne. Retrieved from <https://naturaldisaster.royalcommission.gov.au/publications/exhibit-2-11-mdh5000010001-witness-statement-professor-lisa-gibbs>
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3. Quinn P, Gibbs L, Blake D, Campbell E, Johnston D, Iretton G. Guide to Post-Disaster Recovery Capitals (ReCap). Melbourne, Australia: Bushfire Natural Hazards Cooperative Research Centre; June 2020. Retrieved from <https://www.redcross.org.au/recap>



TEAM MEMBERS

The core ReCap team, academic collaborators, end-users and stakeholder organisations are listed below:

CORE RECAP TEAM

University of Melbourne: Prof Lisa Gibbs, Phoebe Quinn

Massey University: Prof David Johnston, Dr Denise Blake, Emily Campbell

Lead end user representative: John Richardson, Australian Red Cross

ACADEMIC COLLABORATORS

University of Melbourne

Professor Louise Harms, University of Melbourne

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Robyn Molyneaux

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Professor Mehmet Ulubasoglu

Farah Beaini

University of New England

Dr Melissa Parsons

Massey University

Dr Julia Becker

Lucy Kaiser

Professor Darrin Hodgetts

Jessica Thompson

Dr Gail Hutcheson

University of Auckland

Dr Shiloh Groot



END-USER AND STAKEHOLDER ORGANISATIONS

Australian Red Cross

Leadbeater Group

Victoria State Emergency Service

Country Fire Authority

University of Melbourne Department of Social Work

Wellington Region Emergency Management Office

New Zealand Red Cross

Fire and Emergency New Zealand

Phoenix Australia

Social Recovery Reference Group

Australian Department of Home Affairs

Department of Primary Industries and Regions South Australia

Emergency Management Victoria

Resilient Melbourne

Creative Recovery Network

Regional Arts Victoria

Bushfire Recovery Victoria



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2. Pigg K, Gasteyer SP, Martin KE, Keating K, Apaliyah GP. The community capitals framework: An empirical examination of internal relationships. *Community Dev.* 2013;44(4):492–502.
3. Himes-Cornell A, Ormond C, Hoelting K, Ban NC, Zachary Koehn J, Allison EH, et al. Factors Affecting Disaster Preparedness, Response, and Recovery Using the Community Capitals Framework. *Coast Manag.* 2018 Sep 3;46(5):335–58.
4. Miles SB. Foundations of community disaster resilience: Well-being, identity, services, and capitals. *Environ Hazards.* 2015;14(2):103–21.
5. Bronfenbrenner U. The ecology of developmental processes. In: Damon W, Lerner RM, editors. *Handbook of Child Psychology: Vol 1: Theoretical Models of Human Development.* New York: Wiley; 1998. p. 993–1028.