

Global Perspectives on Health Geography

Marynia A. Kolak
Imelda K. Moise *Editors*

Place and the Social-Spatial Determinants of Health

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Global Perspectives on Health Geography

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Valorie Crooks, Department of Geography, Simon Fraser University,
Burnaby, Canada

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Dr. Valorie Crooks (Simon Fraser University, crooks@sfu.ca) is the Series Editor of Global Perspectives on Health Geography. An author/editor questionnaire and book proposal form can be obtained from Publishing Editor Zachary Romano (zachary.romano@springer.com).

Marynia A. Kolak • Imelda K. Moise
Editors

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Editors

Marynia A. Kolak
Department of Geography & Geographic
Information Science
University of Illinois Urbana-Champaign
Urbana, IL, USA

Imelda K. Moise
Department of Medical Education
Dr. Kiran C. Patel College of Allopathic
Medicine
Nova Southeastern University
Fort Lauderdale, FL, USA



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Preface

This book addresses the urgent need to consider the social determinants of health (SDoH) to improve health outcomes, reduce costs, and promote health equity. It explores how incorporating a spatial perspective enriches the concept of SDoH, leading to the notion of social-spatial determinants of health (SSDoH). Given the multidimensional and intersecting nature of health determinants, a spatial perspective is crucial for defining, measuring, understanding, and operationalizing SDoH. Structural factors that influence population health patterns often leave spatial footprints, such as the legacies of redlining or the placement of vulnerable groups near polluted locales. Without an explicit spatial approach, analysis can be biased, misinterpreted, or even impossible. Adopting a geographic view is essential for SDoH studies theoretically, analytically, and technologically. *Place and the Social-Spatial Determinants of Health* brings together geographers, sociologists, clinicians, public health researchers, architects, data scientists, and thinkers to provide rich discussions on the current state of the field and visions for the future.

Urbana, IL, USA
Fort Lauderdale, FL, USA

Marynia A. Kolak
Imelda K. Moise

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To make this text accessible to all communities, we are also grateful to the support by Dr. Avery Everhart (via the University of British Columbia in Vancouver, Canada), Dr. Qinyun Lin (via the School of Public Health and Community Medicine, University of Gothenburg in Gothenburg, Sweden), Dr. Diana S. Grigsby-Toussaint, as well as Dean Leonidas Bachas, College of Arts & Sciences at the University of Miami, and the Robert Wood Johnson Foundation.

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About the Authors

Elizabeth Ackert, Ph.D. is an Associate Professor of Geography at the University of California, Santa Barbara. She is a social demographer with expertise in population geography, immigration, urban geography, and health geography. Her research focuses on racial/ethnic and immigration-related variation in exposure to different types of contexts (schools, neighborhoods, and communities) and the consequences of that differential exposure for outcomes in domains such as education, health, development, and well-being. Dr. Ackert's research has been funded by NIH and NSF, and her work has been published in journals including *Health Affairs*, *Demography*, *Journal of Marriage and Family*, and *Social Science Research*.

Eileen E. Avery, Ph.D. is an Associate Professor of Sociology at the University of Missouri. Her research focuses on residential mobility, neighborhood effects, health and well-being, and social control in urban and rural contexts. Recent and ongoing projects examine rural gentrification, perceptions of social cohesion as it relates to victimization distress, fear, experiences with police, and health and income inequalities.

Madison Avila completed their BA in Sociology and an MA in Demographic and Social Analysis at UC Irvine. Their research interests pertain to gender and work, focusing on women in traditionally male-dominated occupations. More specifically, they research women employed in STEM professions. In the future, Avila wants to research women's retention within STEM occupations and how organizational culture, division of household labor, and parenthood may impact women's persistence in these professions.

Kamaria Barronville, Ed.D., M.F.A. is a Senior Research Assistant at the Healthy Regions and Policies Lab at the University of Illinois Urbana-Champaign. Kamaria is an educator and researcher with a rich background in urban educational leadership and social justice advocacy. She received her EdD in Urban Educational Leadership at Morgan State University, where her research focused on historical

trauma. Kamaria's academic journey includes an MFA in Creative Writing from Full Sail University and a BA in English from Florida Atlantic University.

Susan Cassels, Ph.D. is a Professor in the Department of Geography and Director of the Broom Center for Demography at the University of California, Santa Barbara. She studies and teaches topics broadly related to health geography, demography, and social epidemiology. The central focus of her current research is on geographic mobility, sexual health, and HIV prevention among sexual and gender minorities living in Los Angeles. Specifically, she is interested in differential exposures to social and physical environments and how those exposures align with HIV and substance use risk.

Brianna Chan is interested in using geospatial methods to analyze the role of the natural and built environment in driving health and social disparities. Ultimately, she aims to help heal the relationships between humans and their environments and further promote equitable access to better health in our communities. Brianna received her bachelor's degree in environmental health from the Gillings School of Global Public Health at UNC-Chapel Hill and is currently a Ph.D. student in Geography at the University of California, Santa Barbara, where she is working on research related to population health, neighborhood effects, and spatial equity.

Anjali Choudhury is a Master's student at the University of Washington in Seattle. She is passionate about improving access to safe water and sanitation in underserved communities. She also worked as a research assistant in Dr. Moise's Geography and Inequalities Lab (GaIL) on an ongoing research project investigating the impact of onsite sewer failure and SDOH on ecosystem services. Because of her work on this project, she was awarded the summer of 2023 Beyond the Book fellowship, an award for research-based learning through the College of Arts and Sciences.

Donna Rooney, Ed.D. is a Senior Lecturer at the University of Technology Sydney (UTS) where the primary focus of her research revolves around adult learning. She draws from a range of conceptual resources, including socio-material, public pedagogy, ecological, and practice-based theories. Donna's research has involved studies of adult learning in various spheres, spanning from public spaces, community settings, and workplaces to public institutions and higher education. She has been the recipient of several research awards including a university medal and an industry award for novel methodologies. Donna's research interests inform her teaching practices where she is a passionate educator involved in curriculum design and teaching postgraduate coursework in a Master of Education (Learning and Leadership).

Avery R. Everhart, Ph.D. is a socio-spatial scientist and theorist whose work has been published in a diverse array of fields that range from biomedical informatics to feminist philosophy. Her latest research considers how transgender and other

marginalized communities navigate the complex and overlapping health and legal systems. She uses geographic information systems and spatial analysis to quantify both patterns of access to care and structural and system inequities that shape where care is available. Dr. Everhart is an Assistant Professor of Geography at the University of British Columbia, which is situated on the unceded territories of the *xwməθkwəyəm* (Musqueam) people. She is also Co-founder and Distinguished Fellow of the Center for Applied Transgender Studies.

Praveena K. Fernes is a 2020 Marshall Scholar in the UK, where she is a Ph.D. candidate at the London School of Hygiene & Tropical Medicine. Her current research explores place-based experiences of people who are homeless and seek drug and alcohol services in London, with a special focus on relations of access. Her work strives to advance health equity through transdisciplinary research and using narrative as a tool for change.

Lizandra Garcia Lupi Vergara, M.Sc. is an architect, urban planner, and occupational safety engineer in the area of ergonomics by production engineering at the Federal University of Santa Catarina and Professor at UFSC in Undergraduate and Graduate Studies in Production Engineering and Architecture (PosARQ). She is Vice President of the Brazilian Ergonomics Association, Supervisor of the Ergonomics Laboratory, and leader of the research group *GMETTA* (Multidisciplinary Group of Work Ergonomics and Applied Technologies). She is a Senior Ergonomist Certified by ABERGO, Coordinator of the Technical Group—GT of Ergonomics of the Built Environment and Accessibility—and Member of the Editorial Board of *IJIE Magazine* (Iberoamerican Journal of Industrial Engineering). Her research interests are human factors in health and safety, accessibility, lean ergonomics, user experience, assistive technology, and healthy aging.

Daniel Grafton is a geographer (Ph.D. candidate) whose research focuses on Arctic tourism and the part climate change plays in shaping tourist experiences. He is learning and investigating the dynamics of stakeholder perceptions of moral responsibility for climate change and role of last-chance tourism in rural areas. Other research interests include scientific tourism, historical geography, cinematic cartographies, feminist theory, and gentle geographies.

Gregory Nick Gibson is a medical student at the Warren Alpert Medical School of Brown University. He earned dual BAs in Sociology and Science, Technology, and Society (STS) from Brown University. His research interests center on racial, spatial, and socioeconomic health disparities, with particular focus on women's health and HIV/AIDS prevention.

Diana S. Grigsby-Toussaint, Ph.D. is a tenured Associate Professor of Behavioral and Social Sciences and Epidemiology at the Brown University School of Public Health. As a social epidemiologist, her work is grounded primarily in theoretical approaches from epidemiology, nutrition, and geography. She is

particularly interested in working with vulnerable and racial/ethnic populations across various stages of human development. In addition to the NIH, Dr. Grigsby-Toussaint's research has been supported by the Robert Wood Johnson Foundation, the United States Department of Agriculture, and the National Science Foundation, and her work has been featured in the Huffington Post, the Dallas Morning News, and the Chicago Tribune.

Annemarie G. Hirsch, Ph.D., M.P.H. is an epidemiologist and Professor in the Department of Population Health Sciences at Geisinger, an integrated health system in Pennsylvania. With more than 15 years of experience working with electronic health record (EHR) data, Dr. Hirsch has studied novel applications of health system data for epidemiologic and health service research. As the director of the Geisinger-Johns Hopkins Bloomberg School of Public Health Center for Community Environment and Health, her research focuses on how the social, built, and natural environments impact health. Dr. Hirsch's research is funded by the National Institutes of Health and the Centers for Disease Control and Prevention.

Nick Hopwood, Ph.D., M.D. (Honoris Causa) is Professor of Professional Learning at the University of Technology Sydney (UTS). Nick's research is grounded in the discipline of education, applied in diverse contexts including schools, families, and health services. He teaches in postgraduate coursework Master of Education (Learning and Leadership) as well as contributes to research education and researcher development across UTS. Nick is an active mentor of early and mid-career colleagues and is on the Executive of the International Society for Cultural-historical Activity Research (ISCAR). He co-edits *Studies in Continuing Education* and is on the editorial board for *Mind, Culture, and Activity* and the *African Journal of Education Studies*. Nick was awarded an Honorary Doctor of Medicine from the University of Linköping (Sweden) in 2019 and appointed as Extraordinary Professor at the University of Stellenbosch since 2016

Gabrielle Husted is a Ph.D. student in the Geography Department at UCSB. She earned a Bachelor of Science in nursing from the University of Portland and a master's in Geography from UCSB in 2023. In between her time at the University of Portland and beginning her studies at UCSB, she worked in oncology and public health. Now, Gabrielle investigates the interactivity of people, places, and environment (built and natural) as they relate to public health challenges in our society. Of particular interest are social determinants of health, environmental hazards, and health outcomes. She is working with the Population Health in Geography (PHiG) lab, and her current projects include exploring environmental exposures and geosocial determinants of health as they impact development and prevalence of Alzheimer's disease and related dementias (ADRD).

Ayodeji Iyanda, Ph.D. is a community health geographer specializing in health disparities from a geographic perspective. With a doctorate in Geographic Information Science (GIS) and a multidisciplinary background, Dr. Iyanda has

contributed significantly to the field of health and medical geography. His research on spatial social determinants of health showcases his expertise in geospatial health analysis, emphasizing a commitment to interdisciplinary collaboration and advancing our understanding of health challenges through innovative spatial approaches. This work reflects Dr. Iyanda's dedication to revealing the impact of historical place-based discrimination on health and his passion for addressing pressing societal issues.

Sofia Kaloper is a first-year geography MA/Ph.D. student at the University of California, Santa Barbara. Her broad research interests are in population and health geography, social determinants of health, spatial analysis, spatial statistics, and location-based health interventions. Her current work focuses on quantifying uncertainty in HIV-risk hotspots.

Trace Kershaw, Ph.D. focuses on the social and structural determinants of health among adolescents and emerging adults. His current focus is using innovative technological methods to understand how social and geographic context influences their behaviors and health. He is the Chair of the Department of Social and Behavioral Sciences, the Director of two HIV training grants (Yale AIDS Prevention Training, Research Education Institute for Diverse Scholars), and the Director of the Center for Interdisciplinary Research on AIDS (CIRA).

Danielle C. Kuhl, Ph.D. is an Associate Professor of Sociology at Bowling Green State University. Her research areas focus on neighborhood stratification, life course sociology and victimology, health, and social cohesion. Recent scholarship examines geographic disparities in social processes that influence well-being, place-based influences on substance use and mortality, and developmental mechanisms that link victimization to adult relationships and violence.

Katherine A. Lester, Ph.D. is a medical geographer and spatial statistician with a concentration on mental and behavioral health. Her recent research investigates the spatial relationship between suicide, mental illness, and race and ethnicity. Lester also explores GIS applications to spatial patterns of disease and health. At the University of Southern California, Lester teaches several courses within the Spatial Sciences Institute including maps and spatial reasoning, statistics for the spatial sciences, and introduction to spatial analytics.

Qinyun Lin, Ph.D. is a Senior Lecturer in the School of Public Health and Community Medicine, University of Gothenburg. Most broadly, she is a methodologist invested in humanizing quantitative research to better understand mechanisms underlying inequities, particularly health and educational disparities, and, ultimately, informing policymaking. Towards this, she seeks to advance and expand existing quantitative methods and the interpretation of inferences by incorporating human interactions, social and spatial contexts, and mediating factors within these analyses.

Jailos Lubinda, Ph.D. is a Senior Research Officer at [Malaria Atlas Project](#), Telethon Kids Institute, Western Australia. His research focuses on socio-ecological, eco-epidemiological, and geospatial disease modeling of high-resolution global malaria morbidity and mortality estimates for the World Malaria Report and the Global Burden of Disease Study. He supports fine-scale disease risk mapping for operational and public health decision-making, aiding efficient resource use through targeted interventions. Other interests include modeling arboviruses, malaria, COVID-19, and health system strengthening. His collaborations cut across applied natural, social, and global health approaches to inform intervention coverage, uptake/use, and other socioeconomic and demographic factors driving disease.

Hannah Malak is an MA/Ph.D. student in the Geography Department at the University of California, Santa Barbara. She is broadly interested in the spatial variation of health and healthcare access among vulnerable populations, especially among immigrants, people of color, children, and the elderly. In her future research, she hopes to investigate how sociodemographic and environmental factors impact climate vulnerability and resilience in the context of health outcomes and mortality. Hannah is also interested in open science and science communication. She is particularly passionate about improving the accessibility of scientific knowledge and knowledge production in the discipline of geography.

Ben Moscona is interested in environmental and climate solutions designed with culture and people in mind. Their recent research work is focused on experimental economics in agricultural settings using remote sensing. Moscona currently works on monitoring, reporting, and verification (MRV) of methane emissions.

Oliver Mweemba, Ph.D. is a Lecturer, Researcher, and Head of the Department of Health Promotion and Education at the University of Zambia's School of Public Health. He has over 10 years of research experience in applying socio-behavioral theories and methods to complex public health, health promotion, and healthcare interventions in Africa. He has been the Principal Investigator and Co-investigator on US NIH, Canadian IDRC, and Wellcome Trust-funded projects conducted in Zambia. He has published over 60 peer-reviewed journal articles in international journals and has served on the editorial boards of *Health Promotion International Journal*, *Critical Public Health Journal*, and *BMC Women's Health Journal*.

Bruna Luísa Poffo Nobre is a civil production engineer at the Federal University of Santa Catarina. She is a member of the Multidisciplinary Group of Work Ergonomics and Applied Technologies and the Ergonomics Laboratory. Her research focuses on promoting the well-being of individuals in their work environments through the analysis of processes, data, and human factors.

Ijeoma Opara, Ph.D., L.M.S.W., M.P.H. is an Associate Professor of Public Health in the Department of Social and Behavioral Sciences at Yale School of Public Health. She is also the Founder and Director of the Substances and Sexual Health

(SASH) Lab and a Co-director of the Yale AIDS Prevention Training Program (Y-APT). Her research interests focus on HIV/AIDS, STI, and substance use prevention for urban youth, racial and gender-specific prevention interventions for Black girls, and community-based participatory research with urban youth.

Joseph R. Oppong, Ph.D. is a medical geographer with a geographic focus on Africa and North America. His research interests include social vulnerability, neighborhood characteristics and HIV/AIDS, emerging diseases and health challenges in Africa, and applications of GIS to understanding spatial patterns of disease and health. At the University of North Texas, Oppong teaches a variety of courses including quantitative methods in geography, medical geography, and contemporary sub-Saharan Africa. Oppong is also a Fulbright Scholar, mentoring graduate faculty and establishing student support-focused graduate programs in Ghana.

Widya A. Ramadhani, Ph.D., M.Arch. is a design researcher at Perkins Eastman. She holds a BArch from Universitas Indonesia and an MArch and Ph.D. in architecture from the University of Illinois Urbana-Champaign. Her research, teaching, and creative practices are centered on person–environment transactions to navigate the changes across the life course. She is particularly interested in understanding the physical, social, and cultural factors to inform the design of the built environment to support the health and well-being of older adults in achieving successful aging in place.

Sean C. Reid is a Ph.D. student in the Geography Department at the University of California, Santa Barbara. Sean’s research interests are broadly in urban and population dynamics, health geography, and demography. His current research is focused on migration of sexual and gender minorities in the United States and contextual factors that influence their health outcomes. Sean received his BS in Geography from the University of Utah focusing on GIS and remote sensing. He received his MA in Geography at the University of California with a focus on migration and social determinants of health among sexual and gender minorities.

Tim Rhodes, Ph.D. is Professor of Public Health Sociology with expertise in qualitative research at the London School of Hygiene and Tropical Medicine (UK) and University of New South Wales (Australia). He uses qualitative research methods and analyses of narrative to study evidence-making and intervention in the field of health, linked to epidemics, drug use, and addictions.

Wendy A. Rogers, Ph.D. is Shahid and Ann Carlson Khan Professor of Applied Health Sciences at the University of Illinois Urbana-Champaign. Her primary appointment is in the Department of Kinesiology and Community Health. She has an appointment in Educational Psychology and is an affiliate of the Beckman Institute, Illinois Informatics Institute, Center for Social and Behavioral Science, and Discovery Partners Institute. She received her BA from the University of Massachusetts, Dartmouth, and her MS (1989) and Ph.D. (1991) from the Georgia

Institute of Technology. She is a Certified Human Factors Professional (BCPE Certificate #1539). Her research interests include design for aging, technology acceptance, human-automation interaction, aging in place, human-robot interaction, aging with disabilities, cognitive aging, skill acquisition, and training. She is the Director of the McKechnie Family LIFE Home and the Health Technology Education Program, Program Director of CHART (Collaborations in Health, Aging, Research, and Technology), and Director of the Human Factors and Aging Laboratory.

Bryce Puesta Takenaka, M.A., M.P.H. is a PhD Candidate in the Department of Social and Behavioral Sciences at Yale School of Public Health, and a research fellow in the Yale School of Medicine, Center for Clinical Investigation. His research interests grapple with the issues of settler colonialism, racial capitalism, militarization, carceral infrastructures, and environmental justice-related impacts on health outcomes. He leans into community-driven approaches and transnational epistemologies to inform participatory and radical spatial practices for alternatives to state-sanctioned violence. Bryce earned a Master of Arts in History of Science and Medicine from Yale University, a Master of Public Health in Epidemiology from Saint Louis University, and a Bachelor of Science in Public Health from Lindenwood University.

Juliana Tasca Tissot, Ph.D. is a Professor in the Faculty of Architecture and Urbanism at the Federal University of Pelotas, Brazil. She holds a BArch from Paranaense University, Brazil, MS and Ph.D. in architecture from the Federal University of Santa Catarina, Brazil. Her research, teaching, and practices are centered on the person–environment. She is interested in human factors and the design of physical environments that promote healthy aging and support the well-being of older adults. She is a specialist in aging in place certified by the National Association of Home Builders.

Brooke Ury, MPH is a recent graduate of Brown University, where she received her Bachelor's in Computer Science and Masters in Public Health. As a Fulbright Open Research Fellow and researcher, her work focuses on the impact of the social and built environment on health, including green space and meteorological exposures. In the future, she plans to utilize her technical skills and experience in computer science to advance public health research in environmental health and health equity.

Sigrid Van Den Abbeele is a Ph.D. student in the Geography Department at the University of California, Santa Barbara. She is interested in applying statistical methods to study how systemic inequality impacts health and healthcare access at various spatial scales. Recently, she investigated how factors like residential segregation, population composition, and immigrant destination typology relate to access to safety net primary care facilities. Moving forward, she hopes to examine how changes in policy and population composition impact healthcare access. Sigrid is

also interested in the scholarship of teaching and learning, specifically teaching practices that create more inclusive learning environments.

Esau Casimiro Vieyra is a second-year geography Ph.D. student at the University of California, Santa Barbara. His research interests lie at the intersection of Latino/a/x immigration, health, policy, and spatial data science. Esau's current work looks at spatial patterns and demographic characteristic variations in origin-destination dyads in Mexico-US migration flows. Prior to joining UC Santa Barbara, Esau received a BA in political science from CSU Bakersfield and a master's in public policy from UC Riverside.

Ran Xu, Ph.D. is an applied statistician and Associate Professor in the Department of Allied Health Sciences, University of Connecticut. His methodological research interests include applied data science and systems science. He has developed new statistical and simulation tools for longitudinal analysis, contagion effects in social networks, and implementation science within the organizational context. He also has a broad substantive health-related research interest in disease prevention and health promotion. His works have appeared in high-impact peer-review journals such as *The Lancet Planetary Health*, *Nature Communications*, *Health Affairs*, and *Organizational Research Methods*.

Yvonne Young, Ph.D., M.Hum. recently completed their doctoral studies at the University of Technology, Sydney, Australia. Her professional experience as an educator has led to a sustained interest in supporting families with young children. In 2018, she was awarded the Vice Chancellor's Research Scholarship. Her research focuses on families with young children living in adverse circumstances who need to access multiple services and how that can be accomplished in a way which meets the needs of these families.

About the Editors

Marynia A. Kolak, Ph.D., M.F.A., M.S. is a health geographer and spatial epidemiologist integrating a socio-ecological view of health, spatial data science, and a human-centered design approach to investigate regional and neighborhood health equity. Their research centers on how “place” impacts health outcomes in different ways, for different people, from opioid-risk environments to chronic disease clusters. Kolak is interested in defining the mechanisms and methodological definitions of social-spatial determinants of health and building communities of practice to move the science and policy on SDoH forward. Building on their experience as the Principal Investigator of the US Covid Atlas and policy work in decision support development, Kolak’s current research seeks to define and understand multidimensional access to health resources over time as well as develop the next generation of conceptually grounded, participatory web applications for community health. Kolak is an Assistant Professor at the Department of Geography and GIScience at the University of Illinois at Urbana-Champaign; Academic Director of the *Healthy Regions and Policies Lab*; Visiting Fellow at the Center for Spatial Data Science at the University of Chicago; Associate Editor at *Preventing Chronic Disease*, *Journal of Maps*, and *Cartography and Geographic Information Science*; and a member of the DEI Committee at the Society for Epidemiologic Research. She is also the Vice Chair of the *Health and Medical Geography* Specialty Group at the American Association of Geographers (AAG) and a Lincoln Excellence Scholar from 2024 through 2026, receiving the *Emerging Scholar Award* in Health Geography at AAG in 2022.

Imelda K. Moise, Ph.D., M.P.H. is an applied health geographer and monitoring and evaluation (M&E) expert whose scholarly contributions span health geography, population health, well-being and applied spatial statistical methods. Her current research focuses on generating evidence for precision public policy for families and communities at risk, understanding human behavior in infectious and vector-borne disease transmission, and leveraging to reduce health inequities at the individual, community, and health system scales. She is a recipient of a diverse array of honors for her research and mentorship, such as the College of Arts & Sciences’ Scholarly

and Creative Recognition Award, a series of Provost Awards from 2020 through 2023, and the University of Miami College of Arts & Sciences' Gabelli Senior Scholar Award for her cross-disciplinary contributions. Her mentorship excellence has been acknowledged with the Luis Glaser Mentorship Award and the James W. McLamore Social Science Award. Her expertise in culturally responsive evaluation theory and practice has been recognized with a fellowship from the American Evaluation Association. As a Fulbright Specialist, her contributions to academia have been further celebrated, and she has been a contender for the University of Miami Graduate School Faculty Mentor Award in both 2019 and 2020. Prior to joining the faculty at the University of Miami, Dr. Moise supported USAID-funded health programs in low-middle-income countries on various scopes of work, spent 5 years in Illinois coordinating federally funded research projects and program evaluation for state agency initiatives and ongoing programs, and spent 6 years as a Peace Corps technical trainer in Zambia. Moise is the Editorial Board Member of the *Annals of the American Association of Geographers (the Annals)* where she assists with the Geographic Methods section, an Academic Editor for *PLOS One*, and winner of the Best Paper Award from the *Journal of Map and Geography Libraries*.

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Part I
Introduction

Chapter 8

Spatial Practices That Reshape the Social Determinants of Health for Families with Young Children Affected by Disadvantage



Yvonne Young, Nick Hopwood, and Donna Rooney

Introduction

Early childhood experiences are a key social determinant of health, according to the World Health Organization (WHO, 2008). These experiences can impact a child's development and are compounded for children in families experiencing socioeconomic disadvantage (Hertzman, 2010; Moore et al., 2015). A nurturing family environment and social connection are crucial for these families. Taking these determinants into account, therefore, is essential for services that support families with young children affected by socioeconomic disadvantage. This chapter focuses on social connections between families and services, families and children, families and communities, and between families themselves. Such connections have been identified as important for services seeking to improve the social determinants of health of young children in families affected by disadvantage (Moore, 2021b).

Currently, Australian children living in socioeconomically disadvantaged areas have a higher representation among children who are behind developmentally in more than one domain when starting school (Australian Early Development Census, 2021). This serves to hinder their future life chances (Marmot, 2012). Goldfield et al. (2018) argue that understanding child disadvantage from a social determinants' perspective enables a better understanding of the "complex and multifaceted ways in which disadvantage can manifest" (p. 223). Developmental, health, education, and social issues need to be identified early and responded to. Siloed solutions are inadequate given the nature of the disadvantage experienced by these families (Logan et al., 2018; Moore & Fry, 2011). Delivering services in an integrated, place-based way, therefore, has been considered best practice for some time in Australia (Press et al., 2010), Europe (Glass, 1999), and the United States (Hines, 2017). Integrated service delivery (ISD) is characterized as a holistic approach "joining up

Y. Young (✉) · N. Hopwood · D. Rooney
Faculty of Arts and Social Sciences, University of Technology Sydney, Sydney, Australia

social services to provide a better service to service users” (OECD, 2012, p. 3). More specifically in relation to families, ISD is “the process of building connections between services in order to work together as one to deliver services that are more comprehensive and cohesive and more responsive to the needs of families” (Prichard et al., 2010, p. 5). Although long established as a desirable approach, the question of how ISD can reshape social determinants of health (SDoH) for families with young children remains a key priority in addressing social disadvantage in the early years around the world (H. M. Government, 2021; Marmot, 2020; Moore, 2021a). To address the lacuna in the practices of ISD, the emphasis in this chapter is on social connections as a contributing factor to SDoH (Moore, 2021b).

Place-based child and family learning centers (CFLCs) are informal spaces that operate with the explicit ethos of ISD within Tasmania, Australia. CFLCs offer a variety of services including early education, health, legal, play, and other support for families in some of the country’s most disadvantaged communities. CFLCs vary in design, but all have an informal public space. Everyone visiting a center either passes through them or spends time within them. Spaces can be accessed by parents with or without an appointment. Within these spaces are features designed for children’s play (e.g., sand pits), adult social interaction, open offices, and kitchens. Staff call these spaces “the floor” and parents often call them “play spaces”; however, in this chapter, we refer to them as *shared public spaces*.

Spatial theory can conceptualize the way these spaces enable connections that become the beginnings of ISD. Spaces that produce connections in services for families hold the potential to shed light on how social-spatial determinants of health can be reshaped where children’s health and development are at risk due to socio-economic disadvantage in their community. In this way, shared public spaces can be understood not merely as containers or stages for certain things to happen (play, waiting, making coffee), but as important contributors to improved childhoods and life chances. Accordingly, this chapter integrates a spatial perspective informed by Massey (2005), who views space as dynamic, socially constructed, ongoing, and a coming together of trajectories or stories thus far. The focus is not on formal aspects of services that happen behind closed doors, but within shared public spaces where crucial connections are being produced. This perspective reveals how ISD is accomplished, enriching the idea of place-based services with insights at a granular level pertaining to key practices that created intersections between multiple trajectories, charging connections with what we term “depth in the moment” (see Fig. 8.1).



Fig. 8.1 Conceptualizing practices, space, and connection

In this view, practices are defined broadly as activities engaged by people in shared public spaces. Trajectory is defined as movement from one thing to another, and an intersection of trajectories is the coming together of multiple or different trajectories. Moments with depth are defined as having:

1. Sustained and iterative engagement
2. A redirection of attention from problems to be fixed to production of spaces rich with intersecting trajectories that create depth in the moment
3. Significance in small, mundane acts.

As such, moments of depth are directly linked to addressing the SDoH, especially social connection, and timely access to services that provide support for both the child and the family.

We argue that a spatial reading of these shared public spaces and the deformalized services delivered helps understand how spatial-social determinants of health are established, operate, and can be reshaped, by linking key considerations that are particularly important for families living in disadvantaged circumstances. These considerations include access to safe, comfortable family spaces bursting with opportunities for social connections and pathways to multiple services. We identify the significant practices that produce shared public spaces as places where these imperatives are addressed holistically, as part of ISD, and in so doing, reshape the social-spatial determinants of health at a local, often family-specific level.

The chapter begins with a discussion of current literature on ISD. Next, the study and the sites of the study are described in detail. Following, three key practices of *hanging out*, *consuming food*, and *negotiating* are outlined before looking at how these produce connections with depth in the moment in three different parts of shared public spaces (sandpits, kitchens, and open office areas). The importance of such depth in reshaping SDoH is considered before drawing conclusions about the value of spatial perspectives.

Defining Integrated Service Delivery

Integrated Service Delivery (ISD) is not a new concept. It has been referred to by many different names, including wrap-around, place-based, one stop shop, and joined up services (OECD, 2012), and most recently, family hubs (Honisset et al., 2023). These different terms, however, refer to approaches with key principles in common: families can access more than one service for child care, and there is some kind of connection between these services. There is an extensive body of research literature alongside policy documents focusing on ISD. Yet there is little diversity in approach within this work, which is overwhelmingly evaluative in nature and predominantly employs quantitative analyses (Roberts et al., 2014). Such evaluation is typically concerned with formal structural factors such as colocation and outcomes such as school readiness (Byron, 2010; H. M. Government, 2021; Melhuish, 2016; UK Government, 2013). While important, these foci overlook unfolding, localized

features and outcomes of ISD that are accomplished in the moment, and often in less formal aspects of practice.

Although place-based initiatives have been around for a long time and there is a large body of literature to draw on, there is still much to learn about how to make place-based approaches best work for families (Harris et al., 2023). A new line of work has emerged that takes a broader view of what ISD can mean and its value. The idea of social connection or social cohesion and their relationship to well-being has come into play (Balenzano, 2020; Moore, 2021b). In one Australian study based on interviews and focus groups in eight communities identified as disadvantaged across six states, participants identified the opportunity to connect within their community as a priority (Tanton et al., 2021). A participant in their research expressed it in this way:

I think we need some sort of family and community services here, a connecting space, whether it's events or activities, but also helping the family that needs to be networked with something else. A linking place, a bump-in place (Tanton et al., 2021, p. 194).

What this participant is valuing—social connection—is also recognized in research that shows that social connectedness can lead to longer life, better health, and improved well-being (Holt-Lundstad and Steptoe, 2022; Martino et al., 2015). Holt-Lundstad and Steptoe (2022) argue that social connection is an underappreciated determinant of physical health and that preventing social isolation can improve health. This participant is also identifying a link between providing social connection and providing services, which is what place-based integrated child and family services aim to do.

Recent studies, while mostly evaluative, are focusing on different things, such as the mental health of children and families (Honisett et al., 2022). Positive childhood experiences are now recognized as a counter to the risk of adverse childhood experiences leading to adult mental health issues (Bethell et al., 2019). At the heart of early childhood experiences are connections made in warm and caring environments. Understanding how parents experience service delivery by considering not just the services, but how they are delivered, is crucial (Bulling & Berg, 2018; Butler et al., 2020). This study contributes to understandings of how services are delivered by taking connection as a starting point. Traditionally, ISD has been seen as something that is formally delivered in offices, where colocation is regarded as the spatial key. In contrast, this study focuses on how shared public spaces and practices within them generate connections that can underpin ISD. The ISD created in this way reshapes the social determinants of health for these families.

Positioning the Study

In Australia, and elsewhere, there have been moves toward developing integrated services in place-based centers to address the needs of families with young children that are impacted through socioeconomic disadvantage (H. M. Government, 2021;

Honisett et al., 2023). Disadvantage in families is when families are at risk of adverse impacts from being exposed to multiple social and economic stressors. A prior study of persistent and multilayered disadvantage across Australian states found that disadvantage in Tasmania is concentrated in a small number of geographic locations (Tanton et al., 2021). Six of these locations account for 36% of the most under-resourced positions across all indicators. There are 37 indicators grouped into domains such as social distress, health, community safety, housing, education, lifetime disadvantage, and the environment. Significantly, there is evidence of multilayered disadvantage, as two of the six locations have 19 indicators in the top 5% of disadvantage.

Tasmanian CFLCs exemplify a widespread approach, offering integrated services for families with children under 5 years of age. From the outset CFLCs committed to an ethos of ISD (Department of Education (DoE), 2011). Services available include child health nurses, early education teachers, psychologists, and speech pathologists. However, three factors set these centers apart and make them distinctive:

1. Investment in establishing community support prior to opening. Typically, this involved enabling a group drawn from the local community to make decisions about the building and 12 months of staff involvement with community activities and running playgroups in existing places (Moore, 2021b; Prichard et al., 2015).
2. Innovative practices that facilitate needs-based situational responses are encouraged, rather than the usual known approaches (Hopwood, 2018).
3. Ongoing high level investment by successive governments. In 2009, the Tasmanian Government announced the establishment of child and family centers (now CFLCs). Twelve CFLCs opened around the State between 2011 and 2014. There are now 15 operational CFLCs around Tasmania, with three CFLCs due to open in 2024.

Research Approach

This study was conducted in three Tasmanian CFLCs, each in locations identified as highly disadvantaged. CFLC study sites were determined/enrolled in discussion with the Education Department who manage them.

To create new, finely detailed understandings of how ISD is accomplished in the shared public spaces within CFLCs, design decisions prioritized the generation of granular data linked to specific instances, for which an ethnographic approach was appropriate. Data were generated through 120 hours of participant observations in shared public spaces and 40 semi-structured interviews with staff, volunteers, and parents. All participation was subject to informed consent. In some instances, specific details could not be reported so as to protect participants' confidentiality, hence our focus here is on key patterns that were found across all three CFLC study sites. To ground the study in theory, we integrate a spatialized conceptual model that

upholds a granular, as-it-happens approach, drawing specifically on Massey (2005). Massey (2005) argues that space is an “intersection of a multiplicity of trajectories” (p. 113). The notion of intersecting trajectories underpins the examination of how connections were made and extends to the analysis of their importance and relevance to ISD. Massey refers to space as *a coming together of stories thus far*, meaning that space is always open-ended and never finished, but also that connections have histories and backgrounds in their movement from what was to what is coming to be. This is highly relevant to the ongoing, never-finished work of supporting young children affected by disadvantage. It also disrupts dominant ways of thinking about ISD, focusing less on formal structures and outcomes and more on sometimes fleeting but nonetheless significant interactions that emerge in the vagaries and contingencies of day-to-day practice.

Shared Public Spaces as Produced

A spatial practice perspective understands any space, including shared public spaces in integrated service centers, as produced rather than given. Their spatial-social characteristics reflect what people do rather than being fixed by the container in which practices happen. Prior research has identified that these public shared spaces are perceived as safe and comfortable by parents (Jose et al., 2019; Prichard et al., 2015). In interviews, parents expressed their willingness to come to these spaces because they felt comfortable in them. Parents were enthusiastic about being able to “drop in” to these spaces. As one parent explained:

[W]e can be having a bad day, it doesn't matter what state we are in, I don't have to change my clothes, I can just rock up with tired grumpy kids. The kids can play and I can take breath, sit down and have a cup of coffee.

This was a typical comment from parents who valued the drop-in nature of the informal space and felt that they could turn up at their worst. Some parents whose children had specific needs and who were nervous about how their children's behavior would be perceived appreciated the relaxed nature of the space. One mother, who came with three young children, spent several hours three times a week in the shared informal space expressed her appreciation for the space by responding in this way to a question about what she would like to improve:

[T]here's nothing different that I need to change for me, and that's why I continue to come. If I go somewhere and I struggle with the kids because there might be something that's going to set them off, I don't continue to go because I can't cope in that situation cause I struggle myself with anxiety. However, here I am just 100% comfortable with knowing that everything's safe and everything's fun for my kids and they love coming and there's not a thing I would change not a thing.

Another parent disclosed that she had mental health issues that rendered her dysfunctional, and so her house was messy, and she enjoyed coming to a clean,

comfortable space. Other parents mentioned that they were living in temporary accommodations unsuitable for children and wanted their children to be able to play freely. These findings align with increasing recognition that for many families, housing conditions, which have long been recognized as a major social determinant of health, have become more problematic. In inadequate housing conditions, access to attractive, free spaces within the community is crucial for family well-being (Joseph et al., 2023).

In these comments from parents, the qualities to which they refer should not be seen as innate, but rather produced through staff engaging in practices that have place-based effects. This perspective invites questions about the professional practices involved in these spaces, what is distinctive about them, how they become entangled, and how their enactment unfolds.

Three Key Practices

Three practices were identified as commonly enacted in shared public spaces in the CFLCs to produce safe spaces of warm connection: hanging out, consuming, and negotiating. Each is considered in turn below, followed by an explanation of how these practices led to depth in the moment.

Hanging out

Hanging out can be characterized as a casual presence with purpose. In our study findings, noticing, conversations, and modeling (especially interactions with children) were all part of the hanging out practices. Skillful approaches to conversation produced space as safe and rich with connection. Usually, staff members began chatting informally with families about neutral things such as the weather and traffic. Sometimes the conversation did not progress beyond that, but at other times, it developed into more personal conversations about family matters. These were spontaneous, informal interactions, yet they had a purpose.

In the extract below, a staff member explains her approach to chatting as part of *hanging out* practices in these spaces. She points to the importance of acknowledging the presence of families:

Therefore, it's about being available. Therefore, it truly is, just, just acknowledging our community, so whoever's here at the centre with their kids, it's saying hello. It's greeting them. Again, you're trying to remember last conversations.

She then describes the strategy of engaging families in neutral conversations:

It's asking them what they had for breakfast that morning. Therefore, there are big things that you obviously want to discuss and check in with the families, but I think it's also important to do the smaller... [J]ust that everyday conversation is how I would talk to my colleague, how I would talk to a friend. How would I talk to another mum?

Then she explains the importance of not broaching tricky topics too soon:

Therefore, I think when you have that balance of tricky but also, you know, you can keep things at that... you know, because, sometimes as well, I think, when our families, when they're in that tricky spot, I think sometimes you can actually escalate a problem by going straight in. Therefore, it might not need that kind of attention. Therefore, you can start at a lower, always start at a lower base, and build on that, I truly do try and keep things simple.

The kind of conversations and connections resulting from hanging out in shared public spaces were different from those that might happen in an office setting. Hanging out had a distinctive purpose and value in the production of shared public spaces as key sites at which ISD was accomplished.

Consuming

Consuming practices refer not just to the physical act of eating but more broadly to the preparation, consumption, and sharing of food and drink. Furthermore, practices around food were often combined with other practices, such as story-reading sessions. One center leader described consuming practices as “a hook” to encourage families to come to the center. Observations and interviews confirmed this, as well as other significant contributions consuming practices made to the production of shared public spaces and to ISD as accomplished in the CFLCs. For example, routine weekly food bank deliveries enabled the development of connections over time. In one center, a family’s involvement with the center began with the father visiting weekly to pick up bread. Initially, only eye contact was made with staff. Gradually, over weeks and months, conversations started around the food bank but then moved elsewhere, developing from neutral ones to discussion of more personal matters and eventually disclosure of problems that the family wanted help with. Ultimately, the rest of the family came and spent time in the center.

In another center, staff noticed that a father who only ever came to pick up food and did not engage with staff was looking for fresh bread. There was no fresh bread left, and so the center leader told the center assistant to get bread from the freezer and give it to him. The center leader explained that “we need to take the opportunity whenever we can to do something which will give us a connection, a way into a family.” These are two of the many examples that show how consuming practices were pivotal in engaging families gently and effectively into the wider suite of more formal services offered through the CFLCs. The operation of the food bank through the shared public space provided a soft, gradual entry into the more formal aspects, an entry that could happen at a pace determined by the family.

Negotiating

Negotiating practices refer to how expectations of appropriate behavior were not simply enforced according to a fixed set of rules. There were rules and norms around the use of language, physical force and throwing of objects, and the consumption of food in certain places (such as sandpits). However, moments where behavior broke away from these norms triggered nuanced, emergent practices that negotiated the

contingencies of situations and circumstances. This might involve anticipating things that could become problematic, making judgments to ignore minor things in order to avoid parents feeling overly watched or judged, or working with families to find ways out of challenging situations (e.g., when parents might use foul language in front of children, or a child might aggressively rip a toy out of another child's hands, or when conflict arose between parents).

Managing the shared public space in this way enabled the other two practices of hanging out and consuming to take place in a safe environment. Safety here refers not just to physical comfort or avoiding risk. In line with prior research, the safety produced by negotiating practices was about ensuring families did not feel judged, something that they can feel very acutely in shared, public spaces, especially if their children behave in challenging ways (Boag-Munroe & Evangelou, 2012; The Southern initiative and the Co-Design Lab, 2016). One mother expressed her appreciation in this way:

Um, and I love coming here and not feeling judged in the slightest for anything. You know, I'm breast feeding my baby right now and I never feel judged for that. Even from the girls and from all the parents, so yeah.

Practices enacted in a three-step process transformed what might be experienced as judgmental correction or "telling off" into an opportunity to connect and support families, while also producing broader safety crucial to making the space so comfortable and valuable for families. The first step involved efforts to notice possible issues early before a problem developed; the second involved offering practical help in the moment (such as assisting to calm a frustrated child or modeling calm assertive behavior management); the third involved staff staying with parents after an incident so that their attention was not defined only by an immediate problem but rather endured into calmer, positive moments where a different connection could be established.

Place-Based Practices

Following the description of the fine-grained ethnographic, spatial practice approach used in our study, we now look in detail at practices in each of the three sites within the shared public space. In each of these sites, two of the three key practices were enacted:

- **Sandpits:** hanging out and negotiating
- **Kitchens:** consuming and hanging out
- **Open offices:** negotiating and consuming

Sandpit Sites

At sandpit sites, connections resulted from intersections of trajectories that were typically spontaneous and unplanned. Connections arose between parents and workers and sometimes between parents from different families. These were sites of

free play for children, and unsurprisingly, unexpected incidents could occur, which were observed and responded to through hanging out and negotiating practices. There were repeating triggers from which trajectories came together, namely a child throwing sand, conflict between children, and a child distressed or having a tantrum.

These triggers were common across sandpit sites in all three research locations. Although the resulting connections were unplanned and spontaneous, they had depth. Hanging out practices led to triggers being noticed and often informal conversations being initiated. When needed, negotiating practices (following the three steps discussed above) ensured that connections with parents were supportive and not just corrective in nature.

Negotiating practices sometimes involved strategic ambivalence, that is, when staff noticed something but chose to monitor rather than actively intervene. If the situation developed into an incident that needed a response, staff were able to move in quickly and offer support. Sometimes physical trajectories of moving toward the sandpit to model something or speak to parents came into play. When a child threw sand, the physical trajectory of staff moving within the space would intersect with parents going from struggling with a child's behavior to (supported by and connected with staff) feeling in control of the situation. Depth in the moment here depended on the experience and skill of the staff, who disrupted a trajectory of deteriorating relations between parent and child. After the situation had calmed down, they would stay and chat with their parents. It was through precisely such practices that trajectories of parents moving from not knowing staff to knowing staff and perhaps moving toward a position of trust were accomplished.

Negotiating practices could produce trajectories that led to other sites such as kitchens, transforming a need to manage behaviors into an opportunity to connect. For example, children were not allowed to eat in the sandpits. Instead of just being asked or told to stop, staff would offer to go with a parent and child to somewhere near the kitchen. This prompted not just a movement away from the sandpit but led to the sharing of food. In this way, what might have been a simple matter of reminding parents of rules produced moments of connection with depth.

Kitchen Sites

At kitchen sites, the combination of hanging out and consuming practices created intersections of trajectories, which in turn produced connections with depth. In contrast to the spontaneous connections made in the sandpit, connections made in the kitchens were typically planned and occurred routinely in three ways: cooking classes; staff taking breaks and lunch; and the routine provision of free food (i.e., food bank). For example, the routine of staff having coffee just before the center opened created connections with depth. Permanent staff chatted with visiting staff. This was part of a staff epistemic trajectory (Table 8.1), which came about not from primary contact with families but from what other staff had noticed, perhaps while hanging out. This was particularly relevant when there was a new family with a

Table 8.1 Examples of trajectories in shared public spaces of CFLCs

Kind of trajectory	From	To	Example
Physical	A site	Another site	Moving from kitchen to sandpit
Social	People on their own	People spending time with other people	People chatting together
Epistemic	Unknowing	New ways of knowing	People coming to know about X
Obstructed	Being obstructed by a problem, confidence, or negative experience	Problem, confidence, or experience addressed	People can move on or move on differently

child who was showing signs of delayed development in speech or movement. Here, the depth stems from the knowledge permanent staff gained from observing play in a naturalistic environment or chatting to parents and the professional expertise of the visiting staff member. Four kinds of trajectories were observed – physical, social, epistemic and obstructed (Table 8.1). These trajectories and the resulting depth could occur over several visits.

It is important to note how a Masseyan approach to understanding space also brings temporality into focus. From Massey’s perspective, space is not what is left if we freeze time but is rather charged with temporality. This temporality is tied not to duration but rather to movement in the stories thus far that are extended as trajectories intersect. Momentary connections around kitchens in shared public spaces involved intersections of both immediate trajectories of movements through or changing activities in a center but also longer-term ones, of changing relationships, building trust, and professionals’ deeper understanding of what mattered to families and the support they needed. Thus, consuming practices around the food bank one week could add depth to similar moments a week later.

Open Office Sites

Consuming and negotiating practices were predominant in the open office sites. The consumption practices here were different from those in kitchens and produced different intersections of trajectories. These intersections still created depth in the moment, often relating to the diverse perspectives that different members of staff and visitors brought to bear. In one center, staff intensified the coming together of trajectories around cooking by scheduling visiting professionals’ sessions to coincide with cooking classes. Visiting staff from diverse services could come into the kitchen space, leading to chats about cooking, which often led to chats about other things. Parents who had come to the center for a cooking class would find themselves talking about things such as a concern about their child or how they were feeling stressed. The depth in these incidental conversational moments came from the fact that they were talking to people who often were familiar with these types of problems and could begin to offer pathways to help. Therefore, a parent obstructed

trajectory (Table 8.1) could intersect with a staff epistemic trajectory, as parents started to find ways to address problems and staff learned more about the families' situation. Thus, planning cooking lessons around visiting professionals' schedules led to moments with depth as staff and families chatted. Negotiating practices in open offices often involved staff coming together to share information about incidents as they unfolded. When situations needed a quick response, these intersections created depth, enabling decisions to be made that considered first-hand observation and diverse professional expertise.

Intersecting Trajectories and Depth in the Moment

Hanging out, consuming, and negotiating practices created trajectories that intersected, producing moments that, although ephemeral, had significance and depth. Trajectories here refer not only to concrete movements but also, in a Masseyan spirit, to complex movements, such as those related to knowledge and emotional positions, as presented in Table 8.1.

The trajectories shown above operated on different temporalities. Longer-term trajectories, on which movement was slower and often iterative, included children's behavior, sleep and health, or families' struggles with finances or navigating government organizations such as Centrelink (Australian government organization responsible for welfare payments). Others were more acute situations requiring rapid response, such as family conflict. Some combined both immediate and longer-term movements, such as responses to reported domestic violence.

Intersections of different kinds of trajectories produced meaningful connections. Staff moving physically into the shared space for a break might intersect with a family in a social trajectory. Some intersections depended on others, such as when parents were hesitant to connect with staff but became comfortable doing so once trajectories connecting them with other parents had been established. This was particularly important for parents who mistrusted services and were reluctant to engage with staff (Prichard, 2018). The staff epistemic trajectory could involve staff connecting with parents themselves, or it could come from interaction with other staff who had gained an understanding of a family.

We identified patterns of intersection of trajectories at different sites within shared public spaces. Focusing on sandpits, kitchens, and open office areas highlights important features of these patterns, where trajectories came together to produce connections with depth. These moments with depth were not an endpoint but were part of a continuing story; advancing the work of supporting parents; brokering access across the suite of services delivered; and enabling staff to offer the holistic support that ISD seeks to accomplish. While some connections were planned and others were spontaneous, the combination of planned and emergent connections was crucial to realizing the potential of the shared public space.

Social Determinants of Health Reshaped Through Connections and Depth

Given the current high level of interest in place-based centers offering ISD, it is appropriate to offer fresh ways of understanding how integrated services can be provided. Several studies and policy documents have expressed concern about how COVID-19 exposed a failure to address the SDoH (Marmot et al., 2020) and the resulting inequity (Marmot, 2020; Marmot et al., 2021; Honisett et al., 2023). Early childhood features prominently in these concerns, and place-based approaches feature strongly in responses, including proposed family hubs in Australia and the UK. The present study offers important new understandings of how place-based approaches might address SDoH, specifically revealing how shared public spaces can be produced through informal practices (hanging out, consuming, negotiating) as spaces of connection that underpin families' access to support from more formal services.

Understanding ISD from a spatial perspective offers an alternative to the more common structural focus. This study suggests that informal spaces need to be taken seriously as places where significant work is done. These are not merely waiting spaces but can be produced as spaces where connections with depth abound, contributing to the wider accomplishment of ISD.

Moments with depth arise from the intersection of trajectories, the coming together of stories thus far. Such an understanding links more general ideas of place-based services and colocation with a more fine-grained account of how spaces are produced in particular ways. First, achieving depth in the moment requires sustained and often iterative engagement. Foregrounding the moment does not suggest isolated, fleeting encounters in which problems are solved. Rather, our analysis highlights how depth in one moment often depends on connections made through prior intersections of trajectories. This is of relevance for families who are “hard to reach.” With these families, outreach can help to encourage a first visit, but the real challenge lies in sustaining engagement (Boag-Munroe & Evangelou, 2012). Depth in one moment influences subsequent connections and creates conditions for future moments of depth. Massey explains it this way:

That tree which blows now in the wind out there beyond the train window was once an acorn on another tree, will one day hence be gone. That field of yellow oil-seed flower, product of fertilizer and European subsidy, is a moment—significant but passing—in a chain of industrialized agricultural production (Massey, 2005, p. 119).

In the context of place-based services and their role in addressing SDoH, the “chains” are those of connection between professionals and families, between families and services, and between families and others in their community. These connections are always part of something that remains under construction. Construction need not be continuous, nor unbroken. Trajectories of family engagement with centers might be disrupted, temporarily severed, and then repaired. They may deepen at

different paces and along different fronts. The spatial practice perspective accommodates this complexity in the reshaping of SDoH in a way that is much more difficult if the focus is on more formal structures or bound provisions such as interventions with fixed beginnings and ends.

Second, one of the inherent problems in addressing SDoH are the tensions between the desire to improve things and wariness about disempowering people by solving problems on their behalf, or driving people away from services when they feel judged and professional agendas determining what is done rather than what matters to families. The moments of depth documented here happen through the intersection of trajectories that arise in the production of informal, shared public spaces. Practices of consuming, hanging out, and negotiating provide a healthy balance between the planned (e.g., cooking classes, play activities) and the spontaneous, which are both highly conducive to connections that develop at a pace set by parents but can equally respond to the immediacy of the moment. The tension between the urge to fix the problem and the need to avoid taking over might be alleviated by redirecting “professionals” attention from problems needing fixing to finding ways to produce spaces in a way that promotes connections with depth in the moment.

Third, building on the prior points, the spatial perspective adopted here reveals the significance of seemingly small, mundane acts. Eye contact when a parent picks up free food; sharing a cup of coffee; the response when a child throws sand—these and other acts are far from trivial when they produce shared, public spaces as safe (nonjudgmental) but also rich with connections. This redirects evaluation away from measurables such as attendance at formal programs, frequency, and duration of visits, and instead towards the depth that can be produced within and across moments. Such moments often occur in the enactment of practices that might otherwise be regarded as low value, incidental, or even (especially in the case of hanging out), dead time that should be filled with formal appointments. Shifting from thinking about the SDoH to the social-spatial determinants of health offers a granular, in-the-moment view of how to move the needle on children’s health and development outcomes: small things are revealed to have large effects on the unfolding, never-finished accomplishment of ISD. Collectively, these key points suggest ways to sharpen practices and strengthen access to and links between services without the need for expensive structural redesign but rather by recognizing the value of producing shared, public spaces in particular ways.

Conclusion

This study offers a fresh understanding of the social-spatial determinants of health by investigating how ISD can be accomplished in shared public spaces in place-based or co-located services. It identifies three practices that can produce spaces that are safe and rich in intersecting trajectories that generate connections with depth in the moment. These moments were significant in both being attuned to the

moment and also underpinning the broader unfolding of ISD in responsive, patient ways that met family needs. Identifying these moments with depth can play a part in learning how to reshape the social-spatial determinants of health for families with young children.

This study illustrates that adopting a spatial approach offers new ways of thinking that can contribute to effective ISD. The focus of our study has been on services supporting families with young children. The principles we described, however, of foregrounding practices in shared spaces, rather than on formal provisions behind closed doors, and being ready and able to recognize the value that accrues from informal practices (planned and spontaneous) in creating relevant connections with depth can be taken up in diverse contexts. These contexts include disability services and aged care provision, where social connection is also an important social determinant of health. The Masseyan foundation, viewing space as the intersection of trajectories and tracing the coming together of stories thus far, brings us up close to practices that drive and reshape the social-spatial determinants of health.

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