

HUMAN DEVELOPMENT RESEARCH REVIEW

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Human Development Research Review: Aims and Scope

HELP’s Human Development Research Review (*HELP Reads*) aims to expand awareness of topics in human development, particularly social epigenetics, social determinants of health, socio-emotional learning, Indigenous children and youth, and family policy. *HELP Reads* connects health academics, advocates, and professionals with online and publicly available research, news, and information. This review focuses on listing articles relevant to human development research activities at HELP. The review accepts and welcomes contributions provided they meet *HELP Reads* standards. This review is not official or peer reviewed. It does not cover all research, news, and information, and HELP is not responsible for the accuracy of the content from media or databases. Not all links are open access; some are abstract links where paid journal subscription is required. *HELP Reads* is posted monthly; please see: www.earlylearning.ubc.ca/library/citations.

EDITOR PICKS

Developmental profiles of children at risk for autism spectrum disorder at school entry.

Brenda Poon, Assistant Professor, Human Early Learning Partnership, and co-authors

“Comparison of children in British Columbia who have been referred for an autism assessment, with or without a diagnosis, shows similarities in their functional and developmental profiles in kindergarten. Furthermore....”



Out of the box #5: The benefits of “risky play” for kids [podcast].

Mariana Brussoni, Director, Human Early Learning Partnership

“In this podcast Dr. Brussoni discusses the proven immense benefits of risky play, how it can actually reduce injuries in kids, and whether we as a society have lost the appropriate balance between keeping children healthy and active, and protecting them from serious harm.”



Prevalence of mental health disorders among immigrant, refugee, and nonimmigrant children and youth in British Columbia, Canada.

Anne Gadermann, Assistant Professor, Human Early Learning Partnership, and co-authors

“These findings show differences in diagnostic mental disorder prevalence among first- and second-generation immigrant and refugee children and youth relative to nonimmigrant children and youth.”more



School staff and teachers during the second year of COVID-19: Higher anxiety symptoms, higher psychological distress, and poorer mental health compared to the general population.

Eva Oberle, Assistant Professor, Human Early Learning Partnership, and co-authors

“These results show that priorities to reduce mental health challenges are critical during a public health crisis, not only at the beginning, but also one year later.”



Early adolescents' experiences during the COVID-19 pandemic and changes in their well-being.

Kimberly Thomson, Postdoctoral Fellow, Human Early Learning Partnership, and co-authors

“Results from this study can inform decision making of policy-makers, educators, and practitioners working with youth, by providing information on students' experiences during the pandemic and identifying factors that may be protective for students' mental health during and beyond the pandemic.”



The influence of early-life residential exposure to different vegetation types and paved surfaces on early childhood development: A population-based birth cohort study.

Martin Guhn, Assistant Professor, Human Early Learning Partnership, and co-authors

“Our findings indicate that increased early-life residential exposure to vegetation is positively associated with early childhood developmental outcomes, and...”



Kindergarten educators with children at home struggled during the pandemic — mental health supports are needed.

Natalie Spadafora and Magdalena Janus (right), Affiliate Associate Professor, School of Population and Public Health, UBC

“Concerns about the effects of school closures and COVID-19 disruptions over the past two years are still very much a concern for educators...”



The State of the World's Children. On my mind: Promoting, protecting and caring for children’s mental health 2021.

Johns Hopkins Bloomberg School of Public Health and the United Nations Children’s Fund

“This report examines child, adolescent and caregiver mental health. It focuses on risks and protective factors at critical moments in the life course and delves into the social determinants that shape mental health and well-being...”



Anti-racism Data Act.

Government of British Columbia, 2022

“On May 2, 2022, British Columbia introduced the [Anti-Racism Data Act](#), new legislation aimed at identifying and eliminating systemic racism in government programs and services and paving the way to a more just and equitable province.....”



Game Changer. Will provinces and territories meet the new federal child care fee targets? Canadian child care fees 2021.

David Macdonald, Martha Friendly

“This report assesses which provinces and territories are on track to meet these ambitious targets and which ones might fall behind...”



HUMAN DEVELOPMENT RESEARCH REVIEW

HELP FACULTY and AFFILIATE (selected publications)

1. Brussoni M. **Out of the box #5: The benefits of “risky play” for kids [podcast]**. Live and Learn, BFM; 2022 May 18. Available from: <https://www.bfm.my/podcast/bigger-picture/live-and-learn/out-of-the-box-5-the-benefits-of-risky-play-for-kids>.
2. Gadermann A, Thomson K, Gill R, Schonert-Reichl KA, Gagné Petteni M, Guhn M, et al. **Early adolescents’ experiences during the COVID-19 pandemic and changes in their well-being**. *Frontiers in Public Health*. 2022;10. Available from: <https://www.frontiersin.org/article/10.3389/fpubh.2022.823303>.
3. Gadermann AM, Gagne Petteni M, Janus M, Puyat JH, Guhn M, Georgiades K. **Prevalence of mental health disorders among immigrant, refugee, and nonimmigrant children and youth in British Columbia, Canada**. *JAMA Netw Open*. 2022;5(2):e2144934. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35166784>.
4. Hutchison SM, Watts A, Gadermann A, Oberle E, Oberlander TF, Lavoie PM, et al. **School staff and teachers during the second year of COVID-19: Higher anxiety symptoms, higher psychological distress, and poorer mental health compared to the general population**. *J Affective Disorders Reports*. 2022;8:100335. Available from: <https://doi.org/10.1016/j.jadr.2022.100335>.
5. Ip A, Poon BT, Hanley G, Guhn M, Oberlander TF. **Developmental profiles of children at risk for autism spectrum disorder at school entry**. *Autism Res*. 2022. Available from: <https://doi.org/10.1002/aur.2742>.
6. Jarvis I, Sbihi H, Davis Z, Brauer M, Czekajlo A, Davies HW, et al. **The influence of early-life residential exposure to different vegetation types and paved surfaces on early childhood development: A population-based birth cohort study**. *Environ Int*. 2022;163:107196. Available from: <https://www.sciencedirect.com/science/article/pii/S0160412022001222>.
7. Spadafora N, Janus M. **Kindergarten educators with children at home struggled during the pandemic — mental health supports are needed**. *The Conversation*. 2022. Available from: <https://theconversation.com/kindergarten-educators-with-children-at-home-struggled-during-the-pandemic-mental-health-supports-are-needed-175210>.
8. Watts AW, Hutchison SM, Bettinger JA, Gadermann A, Oberle E, Oberlander TF, et al. **COVID-19 vaccine intentions and perceptions among public school staff of the Greater Vancouver Metropolitan Area, British Columbia, Canada**. *Frontiers in public health*. 2022;10:832444-. Available from: <https://pubmed.ncbi.nlm.nih.gov/35570951>.

HELP RESOURCES

1. Human Early Learning Partnership. **HELP Reads & Literature Reviews HELP Reads: HELP’s Monthly child development citation list**. Vancouver, BC: University of British Columbia, Faculty of Medicine, School of Population and Public Health; 2022. Available from: <http://earlylearning.ubc.ca/library/citations/>.

BIOLOGY/NEUROBIOLOGY (“early experiences”)

1. Crockett LK, Ruth CA, Heaman MI, Brownell MD. **Education Outcomes of Children Born Late Preterm: A Retrospective Whole-Population Cohort Study.** *Matern Child Health J.* 2022;26(5):1126-41. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35301671>.
2. Rainham DG, Bennett M, Blanchard CM, Kirk SF, Rehman L, Stone M, et al. **Parents and Children Should Be More Active Together to Address Physical Inactivity and Sedentary Behaviours.** *Front Public Health.* 2022;10:633111. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35462818>.
3. Roubinov D, Meaney MJ, Boyce WT. **Change of pace: How developmental tempo varies to accommodate failed provision of early needs.** *Neurosci Biobehav Rev.* 2021;131:120-34. Available from: <https://www.sciencedirect.com/science/article/pii/S0149763421004139>.
4. Shonkoff JP, Boyce WT, Bush NR, Gunnar MR, Hensch TK, Levitt P, et al. **Translating the Biology of Adversity and Resilience Into New Measures for Pediatric Practice.** *Pediatrics.* 2022. Available from: <https://doi.org/10.1542/peds.2021-054493>.
5. Yoon S, Pei F, Benavides JL, Ploss A, Logan J, Hamby S. **The Long-Term Effects of Early Childhood Resilience Profiles on School Outcomes among Children in the Child Welfare System.** *Int J Environ Res Public Health.* 2022;19(10):5987. Available from: <https://www.mdpi.com/1660-4601/19/10/5987>.

CHILDCARE, ECD SERVICES

1. Ibrahim E. **Canada’s child-care program will be unbalanced to start, study suggests. Why?** *Global News.* 2022 May 10. Available from: <https://globalnews.ca/news/8822682/canada-child-care-program-study-findings/>.
2. Johnstone A, Martin A, Cordovil R, Fjørtoft I, Iivonen S, Jidovtseff B, et al. **Nature-Based Early Childhood Education and Children’s Social, Emotional and Cognitive Development: A Mixed-Methods Systematic Review.** *Int J Environ Res Public Health.* 2022;19(10):5967. Available from: <https://www.mdpi.com/1660-4601/19/10/5967>.
3. Macdonald D, Friendly M. **Game Changer. Will provinces and territories meet the new federal child care fee targets? Canadian child care fees 2021.** 2022 May 10. Available from: <https://policyalternatives.ca/gamechanger>.
4. Schmitt SA, Mihalec-Adkins B, Lipscomb ST, Pratt ME, Horvath G. **Longitudinal relations among child care stability during the prekindergarten year and behavior problems.** *Children Youth Serv Rev.* 2022;138. Available from: <https://doi.org/10.1016/j.childyouth.2022.106522>.

CHILD DEVELOPMENT (GENERAL)

1. Arrondo G, Solmi M, Dragioti E, Eudave L, Ruiz-Goikoetxea M, Ciaurriz-Larraz AM, et al. **Associations between mental and physical conditions in children and adolescents: An umbrella review.** *Neurosci Biobehav Rev.* 2022;137. Available from: <https://doi.org/10.1016/j.neubiorev.2022.104662>.
2. Brussoni M. **Out of the box #5: The benefits of “risky play” for kids [podcast].** *Live and Learn, BFM;* 2022 May 18. Available from: <https://www.bfm.my/podcast/bigger-picture/live-and-learn/out-of-the-box-5-the-benefits-of-risky-play-for-kids>.

3. Dodd HF, Nesbit RJ, FitzGibbon L. **Child's Play: Examining the Association Between Time Spent Playing and Child Mental Health.** *Child Psychiatry Hum Dev.* 2022. Available from: <https://doi.org/10.1007/s10578-022-01363-2>.
4. Dutil C, Podinic I, Sadler CM, da Costa BG, Janssen I, Ross-White A, et al. **Sleep timing and health indicators in children and adolescents: a systematic review.** *Health Promot Chronic Dis Prev Can.* 2022;42(4):150-69. Available from: <https://doi.org/10.24095/hpcdp.42.4.04>.
5. Harrison L, Sharma N, Irfan O, Zaman M, Vaivada T, Bhutta ZA. **Mental Health and Positive Development Prevention Interventions: Overview of Systematic Reviews.** *Pediatrics.* 2022;149:S1-S39. Available from: <https://doi.org/10.1542/peds.2021-053852g>.
6. Oh C, Carducci B, Vaivada T, Bhutta ZA. **Interventions to Promote Physical Activity and Healthy Digital Media Use in Children and Adolescents: A Systematic Review.** *Pediatrics.* 2022;149:S1-S20. Available from: <https://doi.org/10.1542/peds.2021-053852i>.
7. Oh C, Carducci B, Vaivada T, Bhutta ZA. **Digital Interventions for Universal Health Promotion in Children and Adolescents: A Systematic Review.** *Pediatrics.* 2022;149:S1-S30. Available from: <https://doi.org/10.1542/peds.2021-053852h>.
8. Oliver BE, Nesbit RJ, McCloy R, Harvey K, Dodd HF. **Parent perceived barriers and facilitators of children's adventurous play in Britain: a framework analysis.** *BMC Public Health.* 2022;22(1):636. Available from: <https://doi.org/10.1186/s12889-022-13019-w>.
9. Pfladderer CD, Kwon S, Strehli I, Byun W, Burns RD. **The Effects of Playground Interventions on Accelerometer-Assessed Physical Activity in Pediatric Populations: A Meta-Analysis.** *Int J Environ Res Public Health.* 2022;19(6):3445. Available from: <https://www.mdpi.com/1660-4601/19/6/3445>.
10. Spilker A. **Outdoor play in preschool children: parent attitudes and loose part play in urban settings.** Lincoln, NE: University of Nebraska - Lincoln; 2022. Available from: <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1352&context=natresdiss>.
11. Tangen S, Olsen A, Sandseter EBH. **A GoPro Look on How Children Aged 17-25 Months Assess and Manage Risk during Free Exploration in a Varied Natural Environment.** *Education Sciences.* 2022;12(5):361. Available from: <https://www.mdpi.com/2227-7102/12/5/361>.
12. Weale S. **Adventurous play boosts children's mental health, study finds.** *The Guardian.* 2022 May 20. Available from: <https://www.theguardian.com/society/2022/may/20/adventurous-play-boosts-childrens-mental-health-study-finds>.
13. Zuiderveen KS. **Increasing the Prevalence of risky play in preschool and kindergarten classrooms in the United States.** Allendale Charter Township, MI: Grand Valley State University, Culminating Experience Projects. 130; 2022. Available from: <https://scholarworks.gvsu.edu/cgi/viewcontent.cgi?article=1133&context=gradprojects>.

INDIGENOUS

1. Craft A, Lebihan A. **The treaty right to health: A sacred obligation.** Prince George, BC: National Collaborating Centre for Indigenous Health; 2022 Feb. Available from: https://www.nccih.ca/495/The_treaty_right_to_health_A_sacred_obligation.nccih?id=10361.
2. First Nations Health Authority. **Paddling Together: First Nations Health Authority Health and Wellness Plan.** West Vancouver, BC: FNHA; 2022. Available from: <https://www.fnha.ca/Documents/FNHA-Summary-Service-Plan-2022-2023.pdf>.

- Greenwood M, Atkinson D, Sutherland J. **Supporting health equity for First Nations, Inuit and Métis peoples.** Canada Communicable Dis Rep. 2022;48(4):119-23. Available from: <https://pubmed.ncbi.nlm.nih.gov/35480702>.
- Impact Assessment Agency of Canada. **Guidance: Assessment of Potential Impacts on the Rights of Indigenous Peoples.** Government of Canada; 2022. Available from: <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/guidance-assessment-potential-impacts-rights-indigenous-peoples.html>.
- Maracle GK. **Are Urban Indigenous People Indigenous, Too? Revisiting The distinction-based approach to reconciliation.** Toronto, ON: Yellowhead Institute; 2022 Apr. Available from: <https://yellowheadinstitute.org/wp-content/uploads/2022/04/distinction-based-maracle-2022.pdf>.
- Matheson K, Seymour A, Landry J, Ventura K, Arsenault E, Anisman H. **Canada's colonial genocide of Indigenous Peoples: a review of the psychosocial and neurobiological processes linking trauma and intergenerational outcomes.** Int J Environ Res Public Health. 2022;19(11):6455. Available from: <https://www.mdpi.com/1660-4601/19/11/6455>.

MIDDLE YEARS

- Fox EG, Kahn NF, Battle G. **When youth are experts in the field.** National Academies of Science Engineering and Medicine; 2022 May. Available from: https://issues.org/youth-experts-bcyf-nasem-fox-kahn-battle/?utm_source=NASEM+News+and+Publications&utm_campaign=c3b0ab7a91-EMAIL_CAMPAIGN_2022_05_09_06_17&utm_medium=email&utm_term=0_96101de015-c3b0ab7a91-102675305&mc_cid=c3b0ab7a91&mc_eid=72cce80828.

PARTNERSHIPS, HUBS, INTEGRATED CENTRES/SERVICES

- Gertel-Rosenberg A, Viveiros J, Koster A, Thompson G, Taylor B, Blackburn KB, et al. **Moving the needle on health inequities: principles and tactics for effective cross-sector population health networks.** Curr Opin Pediatr. 2022;34(1):27-32. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34840251>.

POLICY, PRACTICE, INTERVENTIONS

- Fuller AE, Zaffar N, Cohen E, Pentland M, Siddiqi A, Vandermorris A, et al. **Cash transfer programs and child health and family economic outcomes: a systematic review.** Canadian journal of public health. 2022;113(3):433-45. Available from: <https://doi.org/10.17269/s41997-022-00610-2>.
- Government of British Columbia. **Anti-racism Data Act.** Victoria, BC: Government of British Columbia; 2022 May. Available from: <https://engage.gov.bc.ca/antiracism/>.
- Grey EB, Atkinson L, Chater A, Gahagan A, Tran A, Gillison FB. **A systematic review of the evidence on the effect of parental communication about health and health behaviours on children's health and wellbeing.** Prev Med. 2022;159:107043. Available from: <https://www.sciencedirect.com/science/article/pii/S0091743522000913>.

4. Johns Hopkins Bloomberg School of Public Health, United Nations Children’s Fund. **The State of the World’s Children. On My Mind: Promoting, protecting and caring for children’s mental health 2021.** Baltimore, MD and New York, NY: JHU and UNICEF; 2022 May. Available from: <https://www.unicef.org/reports/state-worlds-children-2021>.
5. Loose F, Hudders L, Vanwesenbeeck I, De Jans S. **Preschoolers and advertising: a systematic literature review and future research agenda on the effects of advertising on preschool children.** Journal of Advertising. 2022;1-17. Available from: <https://doi.org/10.1080/00913367.2022.2043794>.
6. Ontario Ministry of Education. **Supporting minds: an educator’s guide to promoting student mental health and well-being.** Toronto, ON: Government of Ontario; 2022. Available from: <https://www.ontario.ca/page/supporting-minds-educators-guide-promoting-student-mental-health-and-well-being>.
7. Sharma N, Asaf A, Vaivada T, Bhutta ZA. **Delivery strategies supporting school-age child health: a systematic review.** Pediatrics. 2022;149:S1-S20. Available from: <https://doi.org/10.1542/peds.2021-053852l>.

SCREENING (tools, methods, school readiness, etc)

1. Duncan L, Smith S, Wang L, Halladay J. **Development and psychometric evaluation of a teacher version of the Ontario child health study emotional behavioural scales (OCHS-EBS-T) for measuring selected DSM-5 disorders in elementary school-aged children.** Psychiatry Res. 2022;312:114574. Available from: <https://doi.org/10.1016/j.psychres.2022.114574>.
2. Villanueva K, Alderton A, Higgs C, Badland H, Goldfeld S. **Data to Decisions: Methods to Create Neighbourhood Built Environment Indicators Relevant for Early Childhood Development.** Int J Environ Res Public Health. 2022;19(9):5549. Available from: <https://www.mdpi.com/1660-4601/19/9/5549>.

SOCIAL DETERMINANTS

1. Lee H. **Family economic hardship and children’s behavioral and socio-emotional outcomes in middle childhood: Direct and indirect pathways.** Children Youth Serv Rev. 2022;138. Available from: <https://doi.org/10.1016/j.childyouth.2022.106527>.
2. Markowitz AJ, Johnson AD, Hines CT. **Food Insecurity in Toddlerhood and School Readiness: Mediating Pathways Through Parental Well-Being and Behaviors.** In: Fiese BH, Johnson AD, editors. Food Insecurity in Families with Children: Integrating Research, Practice, and Policy. Cham: Springer International Publishing; 2021. p. 11-32. Available from: https://doi.org/10.1007/978-3-030-74342-0_2.
3. Ovenell M, Da Silva MA, Elgar FJ. **Shielding children from food insecurity and its association with mental health and well-being in Canadian households.** Canadian Journal of Public Health. 2022;113(2):250-9. Available from: <https://doi.org/10.17269/s41997-021-00597-2>.
4. Polat S, Kröner S. **The resilience of school-age immigrant children: A scoping review.** J Hum Behav Soc Environ. 2022:1-19. Available from: <https://doi.org/10.1080/10911359.2022.2061664>.

5. Salami B, Olukotun M, Vastani M, Amodu O, Tetreault B, Obegu PO, et al. **Immigrant child health in Canada: a scoping review**. *BMJ Global Health*. 2022;7(4):e008189. Available from: <https://gh.bmj.com/content/bmjgh/7/4/e008189.full.pdf>.
6. Zhang W, Qin G, Zhao Z, Liu W, Zhang S, Kumar PM. **The role of socioeconomic status gradients for the child's developmental health**. *Early Child Dev Care*. 2022:1-17. Available from: <https://doi.org/10.1080/03004430.2022.2050718>.

SOCIOEMOTIONAL

1. Bitsko RH, Claussen AH, Lichstein J, Black LI, Jones SE, Danielson ML, et al. **Mental Health Surveillance Among Children - United States, 2013-2019**. *MMWR supplements*. 2022;71(2):1-42. Available from: <https://pubmed.ncbi.nlm.nih.gov/35202359>.
2. Thompson D. **Why American Teens Are So Sad**. *The Atlantic*. 2022. Available from: https://www.theatlantic.com/newsletters/archive/2022/04/american-teens-sadness-depression-anxiety/629524/?utm_source=copy-link&utm_medium=social&utm_campaign=share.
3. Troy D, Anderson J, Jessiman PE, Albers PN, Williams JG, Sheard S, et al. **What is the impact of structural and cultural factors and interventions within educational settings on promoting positive mental health and preventing poor mental health: a systematic review**. *BMC Public Health*. 2022;22(1):524. Available from: <https://doi.org/10.1186/s12889-022-12894-7>.
4. US Centers for Disease Control and Prevention. **Children's mental health report**. Atlanta, GA: US CDC; 2022 Apr 29. Available from: <https://www.cdc.gov/childrensmentalhealth/features/understanding-public-health-concern.html>.

MEDIA (HELP general)

1. Hager M. **B.C. introduces law to collect data on race**. *Globe and Mail*. 2022 May 2. Available from: <https://www.theglobeandmail.com/canada/british-columbia/article-bc-passes-law-to-collect-data-on-race/>.

SPECIAL (COVID-19; Children's Environmental Health)

COVID-19

1. Abrams EM, Greenhawt M, Shaker M, Pinto AD, Sinha I, Singer A. **The COVID-19 pandemic: Adverse effects on the social determinants of health in children and families**. *Annals of Allergy, Asthma & Immunology*. 2022;128(1):19-25. Available from: <https://www.sciencedirect.com/science/article/pii/S1081120621011686>.
2. Gadermann A, Thomson K, Gill R, Schonert-Reichl KA, Gagné Petteni M, Guhn M, et al. **Early adolescents' experiences during the COVID-19 pandemic and changes in their well-being**. *Frontiers in Public Health*. 2022;10. Available from: <https://www.frontiersin.org/article/10.3389/fpubh.2022.823303>.

3. Hazlehurst MF, Muqueeth S, Wolf KL, Simmons C, Kroshus E, Tandon PS. **Park access and mental health among parents and children during the COVID-19 pandemic.** BMC Public Health. 2022;22(1):800. Available from: <https://doi.org/10.1186/s12889-022-13148-2>.
4. Hutchison SM, Watts A, Gadermann A, Oberle E, Oberlander TF, Lavoie PM, et al. **School staff and teachers during the second year of COVID-19: Higher anxiety symptoms, higher psychological distress, and poorer mental health compared to the general population.** J Affective Disorders Reports. 2022;8:100335. Available from: <https://doi.org/10.1016/j.jadr.2022.100335>.
5. Spadafora N, Janus M. **Kindergarten educators with children at home struggled during the pandemic — mental health supports are needed.** The Conversation. 2022. Available from: <https://theconversation.com/kindergarten-educators-with-children-at-home-struggled-during-the-pandemic-mental-health-supports-are-needed-175210>.
6. Statistics Canada. **Youth mental health in the spotlight again, as pandemic drags on.** 2022 May 6. Available from: <https://www.statcan.gc.ca/o1/en/plus/907-youth-mental-health-spotlight-again-pandemic-drags>.
7. Watts AW, Hutchison SM, Bettinger JA, Gadermann A, Oberle E, Oberlander TF, et al. **COVID-19 vaccine intentions and perceptions among public school staff of the Greater Vancouver Metropolitan Area, British Columbia, Canada.** Frontiers in public health. 2022;10:832444-. Available from: <https://pubmed.ncbi.nlm.nih.gov/35570951>.

Children's Environmental Health

1. Balanzá-Martínez V, Cervera-Martínez J. **Lifestyle Prescription for Depression with a Focus on Nature Exposure and Screen Time: A Narrative Review.** Int J Environ Res Public Health. 2022;19(9):5094. Available from: <https://www.mdpi.com/1660-4601/19/9/5094>.
2. Cimino A, McWhirter JE, Papadopoulos A. **An evaluation of the amount, type, and use of shade at public playgrounds in Guelph, Ontario, Canada.** Health Promotion and Chronic Disease Prevention in Canada. 2022;42(5). Available from: <https://www.canada.ca/en/public-health/services/reports-publications/health-promotion-chronic-disease-prevention-canada-research-policy-practice/vol-42-no-5-2022/evaluation-amount-type-use-shade-public-playgrounds-guelph-ontario.html>.
3. Collins T, Phipps E, Giesbrecht D. **Mould, Pesticides, Toxic Chemical Exposures Reported in Survey of Canadian Child Care Professionals.** Toronto, ON: Canadian Partnership for Children's Health and Environment; 2022 May. Available from: https://opha.on.ca/wp-content/uploads/2022/04/CPCHE-CCCF-Media-Release-HELD-2022_EN_FINAL.pdf?ext=pdf.
4. Dabaja ZF. **The Forest School impact on children: reviewing two decades of research.** Education 3-13. 2022;50(5):640-53. Available from: <https://doi.org/10.1080/03004279.2021.1889013>.
5. Gemmell E, Jarvis I, Lavigne E. **Healthy Communities for Canadian Children: Reducing Air Pollution, Increasing Access to Greenspace, and Building Playable Neighbourhoods** [webinar, May 25]. Toronto, ON: University of Toronto, Dalla Lana School of Public Health; 2022. Available from: <https://www.dlsph.utoronto.ca/event/healthy-communities-for-canadian-children-reducing-air-pollution-increasing-access-to-greenspace-and-building-playable-neighbourhoods/>.
6. Jarvis I, Sbihi H, Davis Z, Brauer M, Czekajlo A, Davies HW, et al. **The influence of early-life residential exposure to different vegetation types and paved surfaces on early childhood development: A population-based birth cohort study.** Environ Int. 2022;163:107196. Available from: <https://www.sciencedirect.com/science/article/pii/S0160412022001222>.

7. Ma T, Moore J, Cleary A. **Climate change impacts on the mental health and wellbeing of young people: A scoping review of risk and protective factors.** Soc Sci Med. 2022;301:114888. Available from: <https://www.sciencedirect.com/science/article/pii/S0277953622001940>.
8. Ortegon-Sanchez A, Vaughan L, Christie N, McEachan RRC. **Shaping Pathways to Child Health: A Systematic Review of Street-Scale Interventions in City Streets.** Int J Environ Res Public Health. 2022;19(9):5227. Available from: <https://www.mdpi.com/1660-4601/19/9/5227>.
9. Sprague NL, Bancalari P, Karim W, Siddiq S. **Growing up green: a systematic review of the influence of greenspace on youth development and health outcomes.** J Expo Sci Environ Epidemiol. 2022. Available from: <https://doi.org/10.1038/s41370-022-00445-6>.
10. Villanueva K, Woolcock G, Goldfeld S, Tanton R, Brinkman S, Katz I, et al. **The built environment and early childhood development: qualitative evidence from disadvantaged Australian communities.** Children's Geographies. 2022:1-17. Available from: <https://doi.org/10.1080/14733285.2022.2059651>.
11. Yin S, Kasraian D, van Wesemael P. **Children and Urban Green Infrastructure in the Digital Age: A Systematic Literature Review.** Int J Environ Res Public Health. 2022;19(10):5906. Available from: <https://www.mdpi.com/1660-4601/19/10/5906>.
13. Zare Sakhvidi MJ, Knobel P, Bauwelinck M, de Keijzer C, Boll LM, Spano G, et al. **Greenspace exposure and children behavior: A systematic review.** Sci Total Environ. 2022;824. Available from: <https://doi.org/10.1016/j.scitotenv.2022.153608>.

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