# CHILDHOOD POVERTY IN TIMES OF COVID-19 Challenges and Opportunities for SoL perspective

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### **OVERVIEW**

Impacts and challenges of COVID-19 on child development Focus on poverty, health and educational perspectives

**Developmental approaches to impacts and challenges** 

**Future directions for actions** 

(Health, education, and SoL perspectives)

### **IMPACTS AND CHALLENGES**

(1) The infection with the virus itself

(2) The immediate socioeconomic impacts of measures to stop transmission of the virus

(3) The potential longer-term effects of delayed the implementation of the Sustainable Development Goals

## **IMPACTS AND CHALLENGES**

Health issues

- Social determinants of health
- 42-66 million children could fall into extreme poverty
- Child mortality
- Exacerbation of health inequalities
- Vulnerable groups
- Child malnutrition

Key sectors at particular risk Meals and snacks from schools

• Mental health and well-being Self-regulation demands

### **IMPACTS AND CHALLENGES**

Educational issues

- 188 countries with school closures
   1.5 billion children and youth.
- Quality of educational instruction, digital technology, internet access
- Experience of virtual learning Alternative instructional strategies
- Parental and school district considerations
   Structural barriers
- Absenteeism
- Gender inequalities
- Rural and urban disparities
- Children with disabilities

## **FUTURE DIRECTIONS** WHO-UNICEF-Lancet Commission

# THE LANCET

#### Commissions from the Lancet journals

View all Commissions

#### A future for the world's children? A WHO-UNICEF-*Lancet* Commission

Published: February 18, 2020

#### **Executive Summary**

The health and wellbeing of children now and in the future depends on overcoming new challenges that are escalating at such speed as to threaten the progress and successes of the past two decades in child health. The climate emergency is rapidly undermining the future survival of all species, and the likelihood of a world in which all children enjoy their right to health appears increasingly out of reach. A second existential threat that is more insidious has emerged: predatory commercial exploitation that is encouraging harmful and addictive activities that are extremely deleterious to young people's health.

The WHO-UNICEF-*Lancet* Commission lays the foundations for a new global movement for child health that addresses these two crises and presents high-level recommendations that position children at the centre of the Sustainable Development Goals (SDGs).

**Executive Summary Translations** Available in: Arabic, Chinese, French, Russian, Spanish



#### **Related links**

The Lancet Campaign on Child and Adolescent Health

World Health Organization: A Future for the World's Children

After COVID-19, a future for the world's children?

### Relational Developmental Systems (RDS) frameworks

VARIABILITY OF DEVELOPMENTAL TRAJECTORIES (Multidirectionality and Interdependence)



cronosystem

macrosystem (e.g., culture, physical environment)

**exosystem** (e.g., social organization)

mesosystem (e.g., teacher-parents meetings)

microsystem (e.g., family)

behavioral

cognitive/emotional

**biological/physiological** (neural activity)

**biological/physiological** (genetic activity)

ontosystem

SOURCE: Lipina, 2019 (modified from Lerner, 2018).

### **FUTURE DIRECTIONS:** Social and health determinants

ontosystem



SOURCE: Bradley, 2015; Bronfenbrenner, 1979; Lipina, 2016; Yoshikawa et al., 2012.

### **FUTURE DIRECTIONS:** Social and health determinants



SOURCE: Bradley, 2015; Bronfenbrenner, 1979; Sheridan & McLaughlin, 2014; Yoshikawa et al., 2012.

Identification of vulnerable groups



Health perspective

- Nutrition
- Vulnerable groups

Disability and disadvantages perspectives Vulnerabilities clusters

• Poverty perspectives

**Educational perspective** 

• Availability of resources Structural barriers

**Educational perspectives** 

- Availability of resources
- Reopening schools

**Table 1.** Strategies being adopted internationally to reopen schools after the

 COVID-19 lockdown

STRATEGY	Countries
Maintain closures indefinitely until a	Current default position for most countries eg, Canada,
vaccine or treatment available	Israel, Italy, Malta, Spain, UAE, many US states
Open completely	Some regions of Japan; Taiwan
Partial reopening:	
By school-level (eg, primary schools)	Denmark, France, Germany, Iceland, Israel, Mexico,
	Netherlands, New Zealand, Norway, South Africa,
	Sweden, Vietnam; regions of China
Shifts	Vietnam
Outdoor schooling	Denmark
Hybrid physical and virtual school	New Zealand, Vietnam; regions of Russia

**Educational perspectives** 

- Availability of resources
- Reopening schools
- Child labor

Role of Science

- Pending questions
- Research
- Advocacy

## Role of Science

- Pending questions
- Research
- Advocacy



#### A PACKAGE APPROACH TO CHILD POVERTY REDUCTION



#### **Role of Science**

- **Pending questions** •
- Research •
- **Advocacy** ۲
- Networking •

#### TICS 2060 No. of Pages 3

#### ARTICLE IN PRESS

object recognition.

Trends in Cognitive Sciences



#### Science & Society

Online Developmental Science to Foster Innovation, Access, and Impact

Mark Sheskin.1,2,13,\* Kimberly Scott, 3,13 Candice M. Mills,4 Elika Bergelson,5,6 Elizabeth Bonawitz,7 Elizabeth S. Spelke,<sup>8</sup> Li Fei-Fei,<sup>9</sup> Frank C. Keil,<sup>1</sup> Hyowon Gweon,<sup>10</sup> Joshua B. Tenenbaum,<sup>3</sup> Julian Jara-Ettinger,<sup>1</sup> Karen E. Adolph.<sup>1</sup> Marjorie Rhodes.11 Michael C. Frank, 10 Samuel A. Mehr.<sup>8,12</sup> and Laura Schulz<sup>3</sup>

We propose that developmental cognitive science should invest in tion for Reproducible and Distributed of social and communicative phenomena an online CRADLE, a Collaboration Large-Scale Experiments (CRADLE). This that require live interaction. for Reproducible and Distributed discipline-wide infrastructure would support and society.

#### The Need for Large-Scale, Shared (EEG)], or interactions with physical objects Infrastructure for Developmental Science

society, including how we use the internet. opmental science research. Technology companies are recognizing

advantages of permanent 'work from Current Efforts Towards Large-Scale projects: we envision a shared infrastruchome' policies, the healthcare industry is Infrastructure in Developmental re-evaluating its core infrastructure to sup- Science port telemedicine, and schools are pushing. The internet is already used in several sharing; families find and participate in

the current limits of remote learning. Many ways to support developmental science, studies across developmental science, of these developments are not new ideas, The Child Language Data Exchange and researchers coordinate as members

but rather overdue accelerations and System (CHILDES [3]) allows the reuse extensions of existing trends. Paralleling of high-value data sets by thousands of previous moves to online research in other researchers across many countries. The areas of cognitive science (e.g., adult sur- Databrary Project (Databrary.org [4]) likevevs on Amazon Mechanical Turk [1]), re- wise makes video data globally accessible. searchers are using the internet in multiple Laboratories use the internet to closely ways to support developmental science. coordinate their in-person data collec-Here, we argue that a unified platform for tion, leading to distributed, large-scale online developmental science would bene- data collection (e.g., the ManyBabies fit both researchers and society. Consortium [5])

Our call for large-scale coordinated ac- Recently, several groups established tion mirrors advances in other sciences. platforms to collect data with children on-Consider the Hubble Space Telescope: line, including unmoderated studies that although many meaningful discoveries are available any time (Discoveries Online can be and were made with individually [6]; Lookit [7]; and themusiclab.org [8]), owned telescopes, Hubble hosts large- and moderated studies that are schedscale collaborative research that would uled video sessions with a researcher otherwise be impossible. Similarly, ImageNet (TheChildLab.com [9]). Potential advan-[2], which crowdsourced a massive amount tages of unmoderated studies include of image-labeling data, transformed machine rapid collection of large samples and high consistency of study delivery: moderated studies enable live interaction with re-For developmental science, we propose searchers to maximize child engagement a unified, discipline-wide, online Collabora- and science outreach, and allow the study

Large-Scale Experiments that 'big science' research that would otherwise As multiple projects develop in parallel, crowdsources data from families be impossible, and would also be a transfor- researchers have begun to discuss adparticipating on the internet. Here, mative platform for many 'small science' vantages of larger collaborations. A first we discuss how the field can work studies to produce better and more repro- step in this direction is a joint website together to further expand and ducble data. An online CRADLE is advanta- (Children HelpingScience.com) that allows unify current prototypes for the geous even for studies that cannot be families to browse studies from many conducted online, such as those that rely researchers across the world and find benefit of researchers, science, on specialized physical spaces (e.g., visual information about how to participate in a cliff studies with infants), special recording chosen study (which then takes place outequipment [e.g., electroencephalogram side of the joint website).

(e.g., physical puzzles), in that it frees up We appreciate the value of these preresources for those in-person studies. existing projects (indeed, many of the The COVID-19 pandemic has disrupted Thus, it can increase the quality of all develores we described earlier are our own). However, our suggestion for an online CRADLE goes beyond the sum of these ture for recruitment, experiment implementation, data collection, and data

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Role of Science

- Pending questions
- Research
- Advocacy
- Networking



#### About Us

Welcome to the SES Neuroscience Network (SESN).

OUR GOAL is to connect researchers studying poverty and socioeconomic status from a neuroscience perspective. We hope to increase access to research knowledge and foster interaction among interested researchers worldwide.

Here you will find a DIRECTORY OF SES NEUROSCIENCE RESEARCHERS and POINTERS TO RELEVANT ARTICLES, with legal methods for obtaining access when available.

We hope you will choose to join us!

Role of Science

- Pending questions
- Research
- Advocacy
- Networking
- SoL potential specific topics
  - Loneliness Parental mental health Emotional symptoms (media) Health habits
    - **Pedagogies and learning strategies**
    - Physical exercise, nutrition, sleep

## **PROVISIONAL CONCLUSIONS IN HYPER-DYNAMIC TIMES**

- Expand critical programs
- Digital learning gaps
- Social service
- Research
- Delivery mechanisms
- Infrastructure initiatives

# Thank you for your attention... ... and take care.

🐨 COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins Uni...

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