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OF EDUCATION

The developmental and health consequences of corporal punishment around the globe

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I will summarize three key findings from contemporary scientific research on corporal punishment and child development

1

Corporal punishment is prevalent around the globe

2

Corporal punishment can undermine brain development

3

Corporal punishment can impair cognitive and social-emotional development

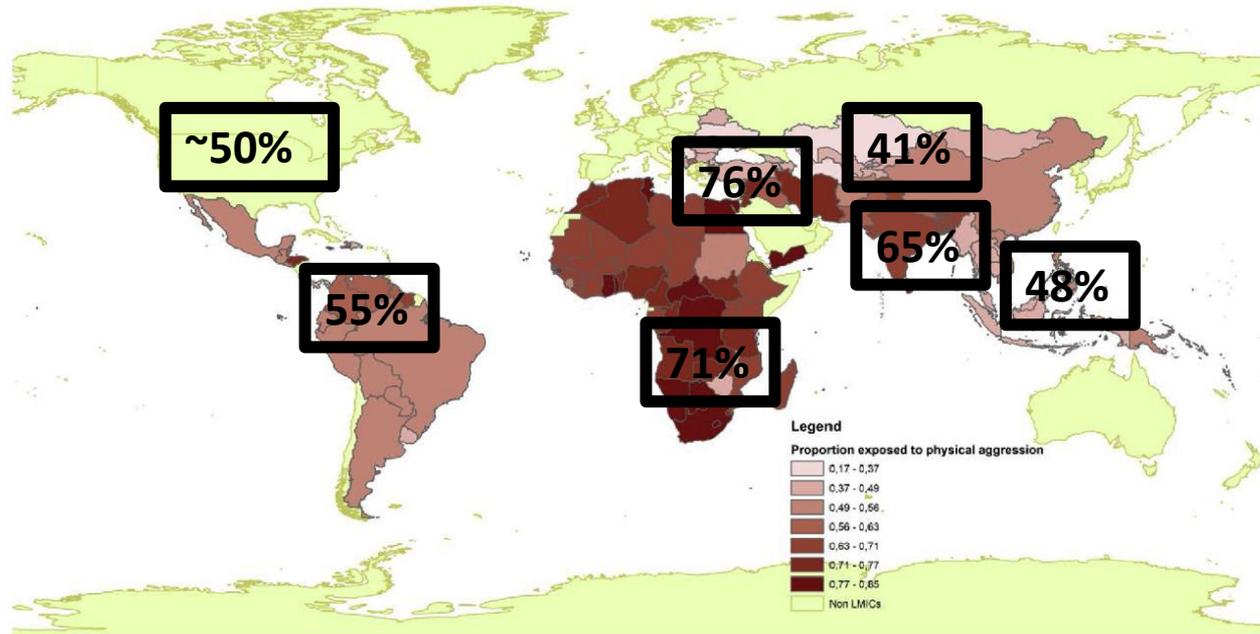


Finding 1:

Corporal punishment is
prevalent around the globe



Corporal punishment is prevalent around the world



About 2 out of 3 children suffered corporal punishment before COVID-19

Corporal punishment has increased amid the pandemic

- Cuartas, J., McCoy, D. C., Rey-Guerra, C., Britto, P. R., Beatriz, E., & Salhi, C. (2019). Early childhood exposure to non-violent discipline and physical and psychological aggression in low- and middle-income countries: National, regional, and global prevalence estimates. *Child Abuse & Neglect*, 92, 93-105. doi:10.1016/j.chiabu.2019.03.021
- Ryan, R., Kalil, A., Ziol-Guest, K., & Padilla, C. (2016). Socioeconomic gaps in parent's discipline strategies from 1998 to 2011. *Pediatrics*
- Finkelhor, D. et al. (2019). Corporal punishment: Current rates from a national survey. *Journal of Child and Family Studies*, 28, 1991-1997



Community and society

Laws against violence (including corporal punishment)

Social, economic, and gender equity

High-quality health and education services

Appropriate social norms

Effective social programs

Strong communities

Economic inequality

Racism, oppression, discrimination

Gender inequity

Crime and war

Social and legal normalization of violence

Insufficient health and education services

High poverty

Family and household

Knowledge on childrearing and child development

Shared parenting load

Safe contexts

Nurturing care

Unrealistic expectations of what children can do

Weak social bonds

Mental health challenges

Adverse childhood experiences

Poverty

Domestic violence

Child

Social-emotional skills

Age

Sex/Gender

Disability



Protection

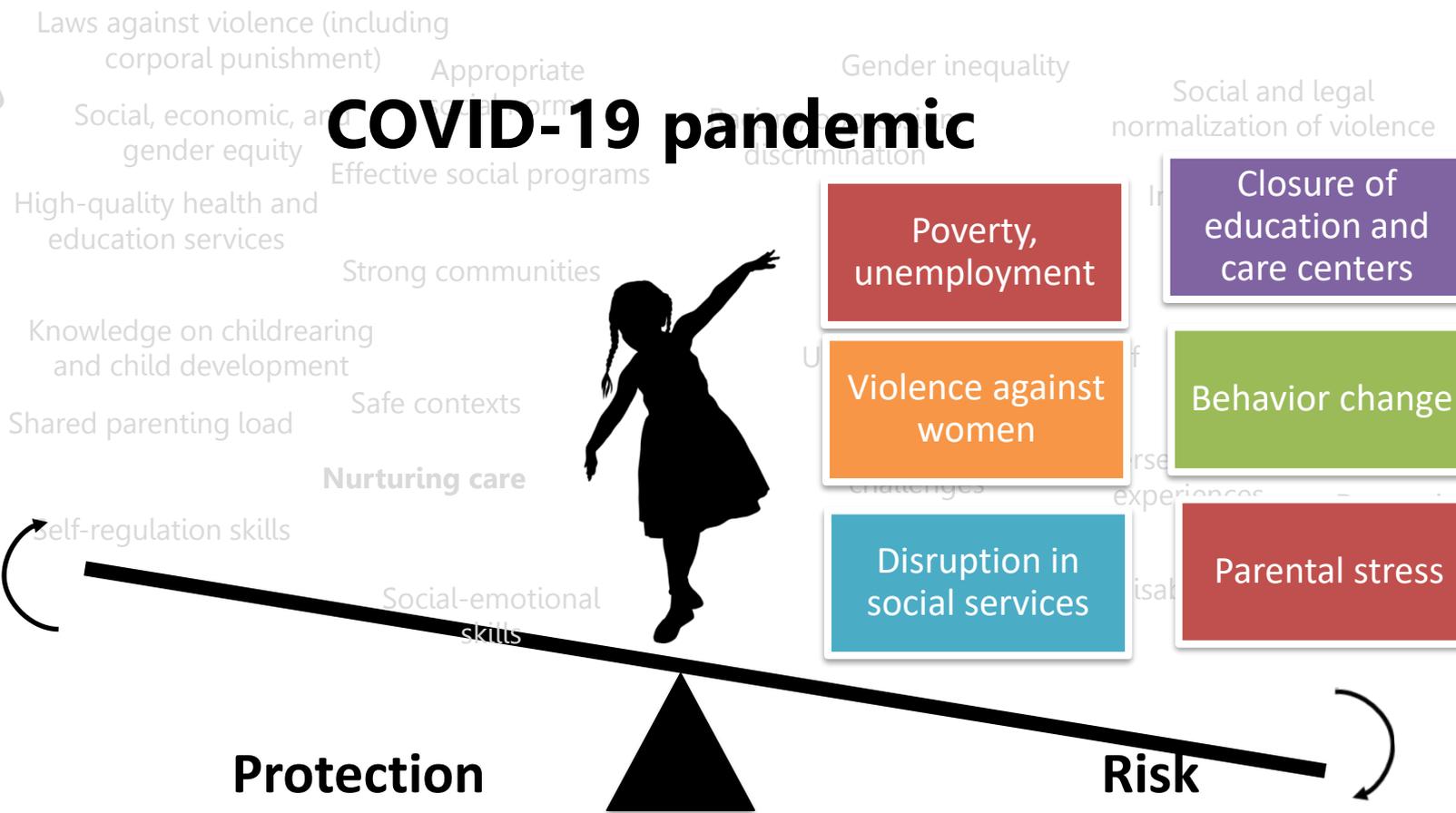
Risk

- Cuartas, J., & Rey-Guerra, C. (2020). Guidance for families to prevent violence in early childhood in the time of COVID-19: toolkit. Retrieved from Panamá: <https://www.unicef.org/lac/en/reports/guidance-families-prevent-violence-early-childhood-time-covid-19>
- UN World Health Organization (WHO). (2016). INSPIRE: Seven Strategies for Ending Violence Against Children. Retrieved from <https://www.refworld.org/docid/57878f5e4.html>



COVID-19 pandemic

Community and society
Family and household
Child



- Cuartas, J., & Rey-Guerra, C. (2020). Guidance for families to prevent violence in early childhood in the time of COVID-19: toolkit. Retrieved from Panamá: <https://www.unicef.org/lac/en/reports/guidance-families-prevent-violence-early-childhood-time-covid-19>
- UN World Health Organization (WHO). (2016). INSPIRE: Seven Strategies for Ending Violence Against Children. Retrieved from <https://www.refworld.org/docid/57878f5e4.html>



Finding 2:

Corporal punishment can
undermine brain development

Corporal punishment can undermine brain development

Corporal punishment triggers harmful physiological and psychological responses

Children experience **sadness, fear, pain, anger, shame, guilt** when corporally punished - evidence from Brazil, Colombia, Ghana, New Zealand, The Philippines, South Africa, the U.S., and other settings

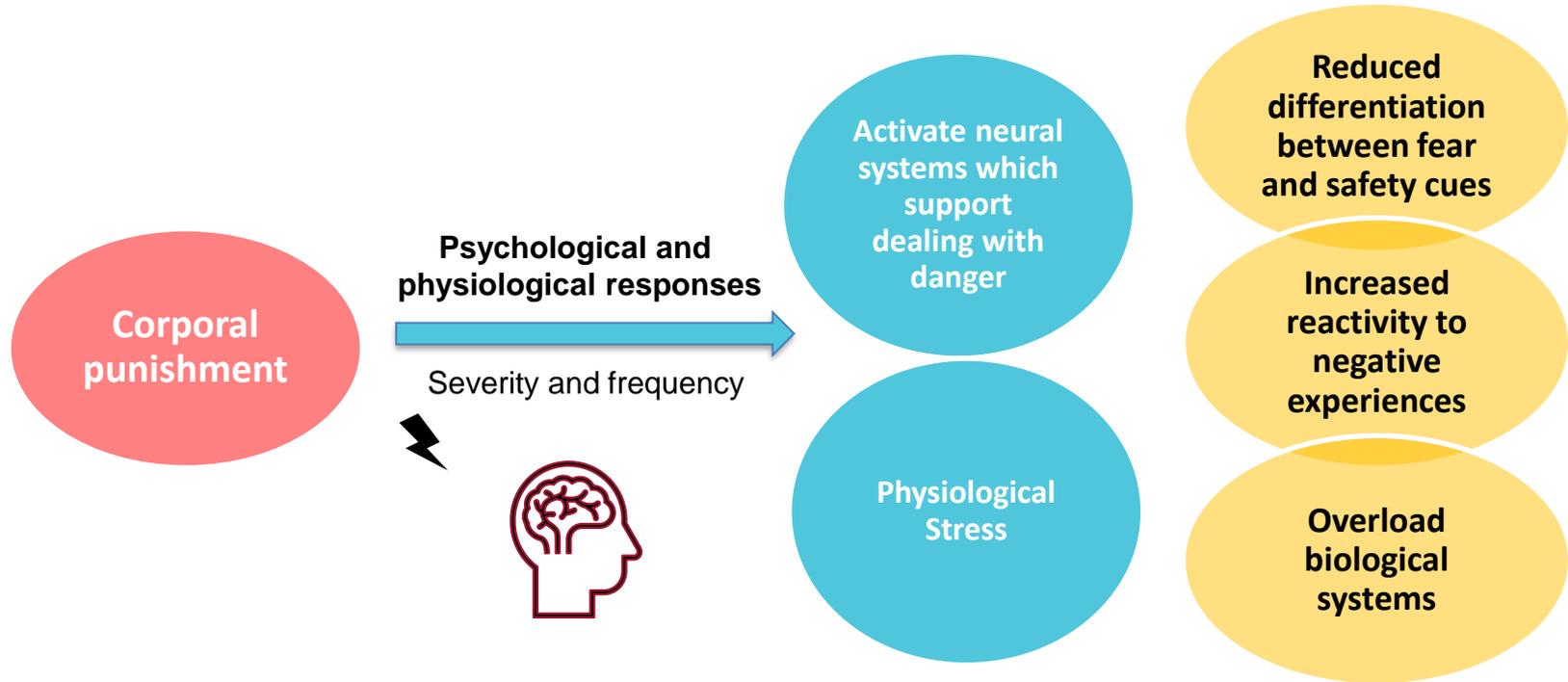


Moreover, children exposed to corporal punishment **feel threatened** when punished and tend to **exhibit high hormonal reactivity to stress**, likely due to the physiological stress caused by the punishment.

Lima, Lira, Oliveira, Campos, & Paiva, 2021; Gonzáles, Trujillo, & Carvalho, 2019; Twum-Danso Imoh, 2013; Dobbs & Duncan, 2004; Wartenweiler & Mansukhani, 2016; Breen, Daniels, & Tomlinson, 2015; Vittrup & Holden, 2010.

Bugental, D. B., Martorell, G. A., & Barraza, V. (2003). The hormonal costs of subtle forms of infant maltreatment. *Hormones and Behavior*, 43(1), 237-244.

A biologically-based mechanism indicates that the consequences of corporal punishment will likely be universal, and scale in relation to its severity/frequency

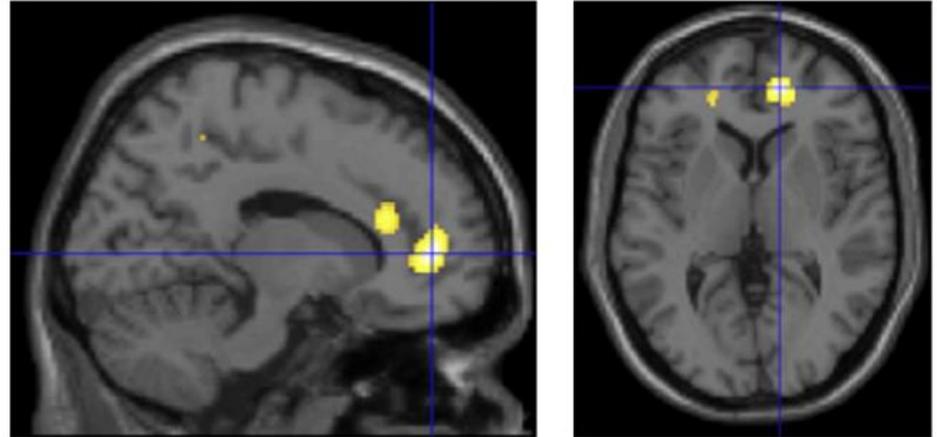


McLaughlin, K. A., Weissman, D., & Bitrán, D. (2019). Childhood Adversity and Neural Development: A Systematic Review. *Annual Review of Developmental Psychology*.

Corporal punishment can undermine brain development

Corporal punishment is linked to changes in brain structure

Prefrontal cortex volume was reduced by 15% - 19% for adults who were exposed to 'harsh' corporal punishment (hit with objects).



Tomoda, A., Suzuki, H., Rabi, K., Sheu, Y.-S., Polcari, A., & Teicher, M. H. (2009). Reduced prefrontal cortical gray matter volume in young adults exposed to harsh corporal punishment. *NeuroImage*, 47, T66-T71.

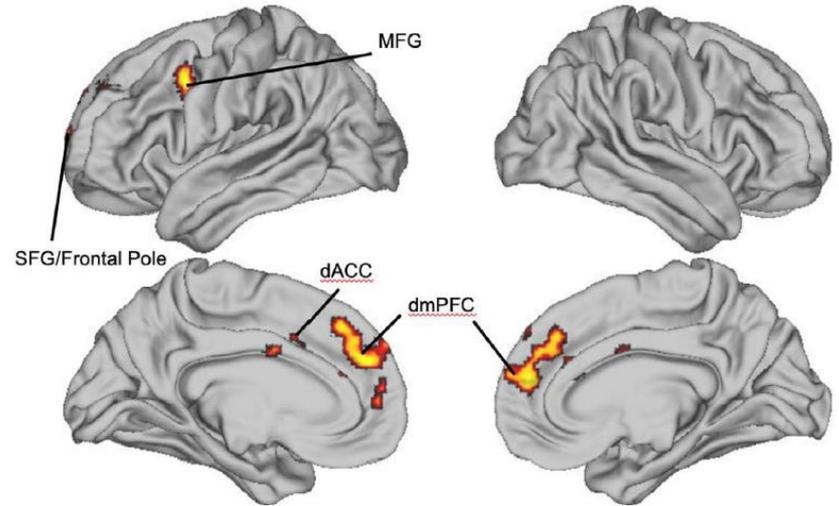


Corporal punishment can undermine brain development

Socially normative 'spanking' linked to atypical brain function

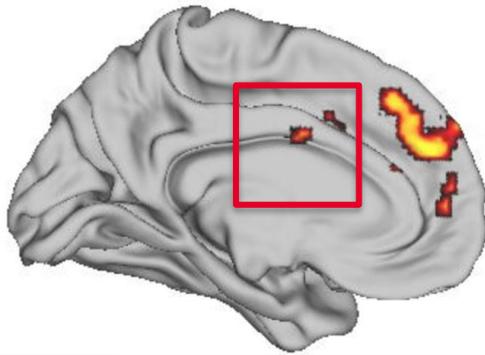
Children who experienced more severe physical abuse or sexual abuse were excluded from the study

Children who were spanked exhibited **atypical neural activation** in response to threatening stimuli in areas of the prefrontal cortex relative to children who were not spanked.



Corporal punishment can undermine brain development

What are these findings telling us?



**Dorsal Anterior Cingulate
Cortex (dACC)**

Multiple studies reporting that more severe abuse impacts dACC

Reinforces the idea that distinguishing 'normative corporal punishment' from abuse is meaningless - both are forms of violence that constitute violations to children's right to protection and could lead to negative developmental consequences.

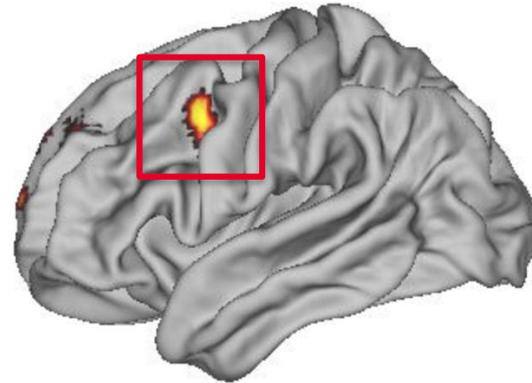


Corporal punishment can undermine brain development

What are these findings telling us?

The MFG is often engaged during effortful attempts to regulate emotional responses

This could indicate that the brain of children who were spanked have a tendency to interpret neutral situations as threatening.



Middle Frontal Gyrus (MFG)

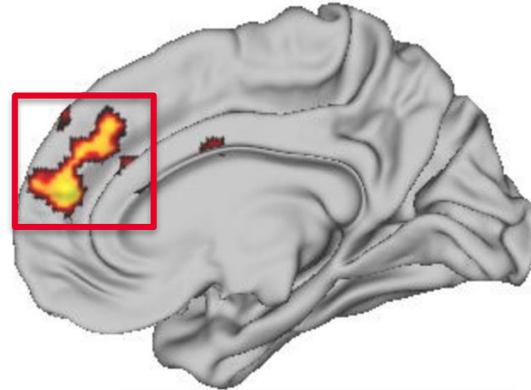
Corporal punishment can undermine brain development

What are these findings telling us?

The dPFC and frontal pole are involved in several social-cognitive processes, including social information processing

This suggests that spanked children devote greater attentional resources to processing fear/threatening stimuli, perhaps at expense of other cognitive and social-emotional processes

Increased risk for mental health problems



Dorsomedial prefrontal cortex (dPFC) and bilateral frontal pole

Corporal punishment can undermine brain development

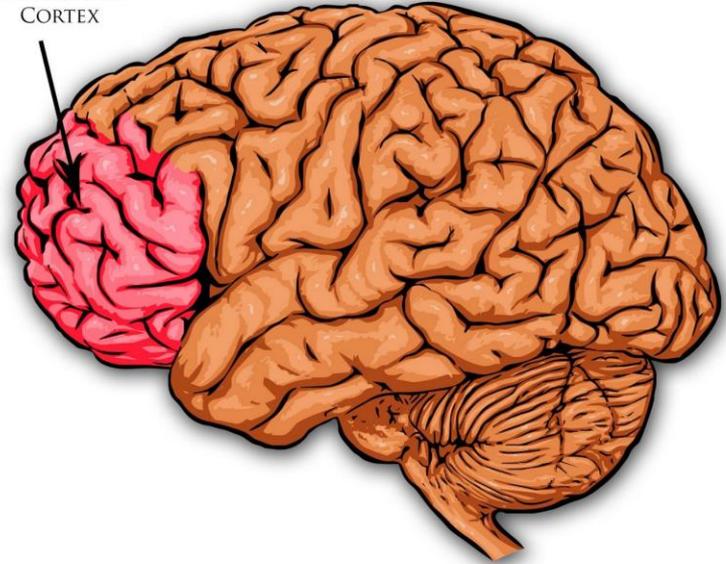
What are these findings telling us?

The prefrontal cortex (PFC) develops from infancy to late adolescence.

It plays a central role on high-order cognition (e.g., executive function) and social-emotional skills, like self-regulation.

Behaviors and disorders related to self-regulation, such as substance use and risky/antisocial behavior are costly to individuals and societies.

PREFRONTAL
CORTEX



Finding 3:

Corporal punishment can
impair cognitive and social-
emotional development



Corporal punishment can impair cognitive and social-emotional development

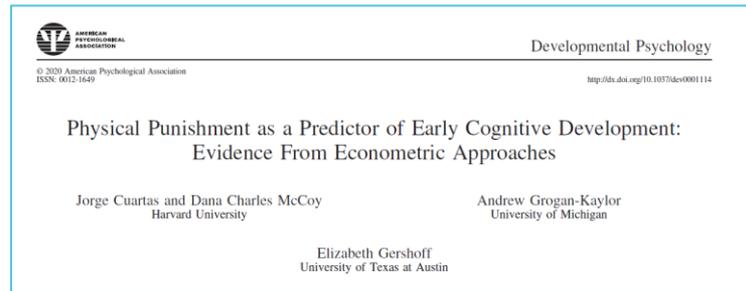
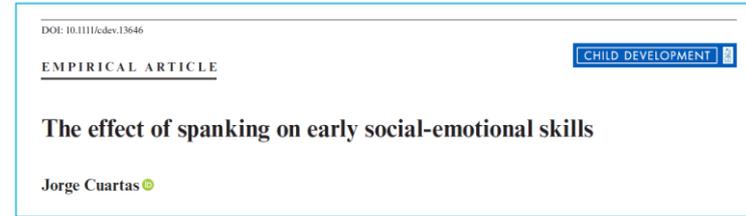
Spanking undermines cognitive and social-emotional development

Recent studies followed young children in time and used advanced statistical techniques to identify the **causal effect** of spanking on children's outcomes

A study of a national sample of Bhutanese young children found that spanking **impairs social-emotional development**, specifically emotion regulation and conflict solving skills

Another study from Colombia found that infants who were spanked at ages 9-26 months had **slower cognitive growth** at ages 27-46 months

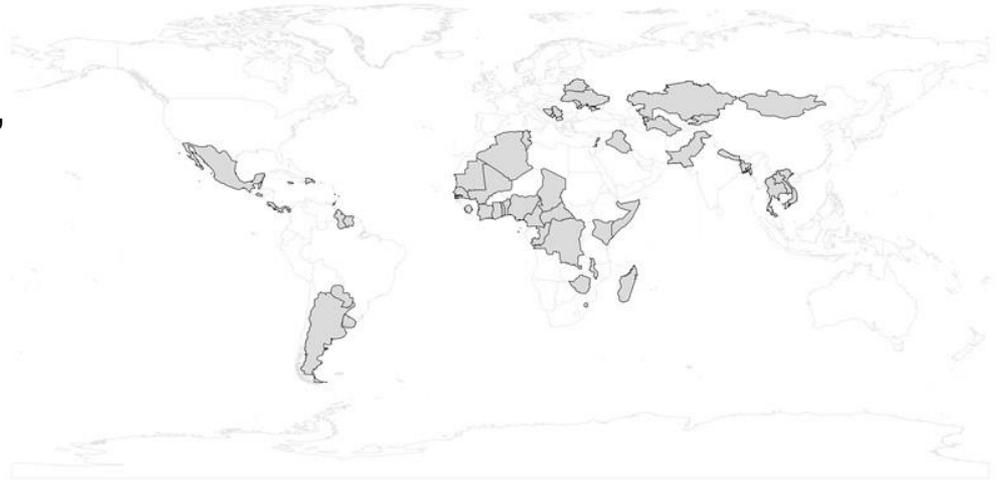
- Cuartas, J. (2021). The Effect of Spanking on Early Social-Emotional Skills. *Child Development*.
- Cuartas, J., McCoy, D. C., Grogan-Kaylor, A., & Gershoff, E. (2020). Physical punishment as a predictor of early cognitive development: Evidence from econometric approaches. *Developmental Psychology*, 56(11), 2013-2026.



Corporal punishment can impair cognitive and social-emotional development

Spanking relates to negative child outcomes across cultures and countries

One study examined the links between spanking and social-emotional development in 62 socially, economically, and culturally diverse countries



- Pace, G. T., Lee, S. J., & Grogan-Kaylor, A. (2019). Spanking and young children's socioemotional development in low- and middle-income countries. *Child Abuse & Neglect*, 88, 84-95
- Cuartas, J. (2021). Corporal punishment and early childhood development in 49 low- and middle-income countries. *Child Abuse & Neglect*, 120, 105205.

Corporal punishment can impair cognitive and social-emotional development

Spanking relates to negative child outcomes across cultures and countries

Out of 62 countries, spanking predicted negative social-emotional outcomes in 59 (null findings in 3)

In 49 countries, children exposed to corporal punishment were about 24% less likely to be developmentally on track according to an indicator for the **Sustainable Development Goals**

Corporal punishment is not “beneficial” in any culture or country



- Pace, G. T., Lee, S. J., & Grogan-Kaylor, A. (2019). Spanking and young children's socioemotional development in low- and middle-income countries. *Child Abuse & Neglect*, 88, 84-95
- Cuartas, J. (2021). Corporal punishment and early childhood development in 49 low- and middle-income countries. *Child Abuse & Neglect*, 120, 105205.

Conclusions

1

Not a single study has found that corporal punishment might be beneficial to children's health or development in any culture or country

2

In contrast, studies from many diverse countries around the world show consistent links between corporal punishment and negative child developmental and health outcomes

3

The consistency of findings across countries and underlying biologically-based mechanisms (brain development) suggests that corporal punishment might be universally harmful to children's health and development

4

Corporal punishment was prevalent and has increased amid the pandemic. Parenting programs, supports for parents, massive education campaigns, and legislation prohibiting all forms of corporal punishment are needed





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Gracias | Obrigado | Thank you

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