

KEYWORDS — parenting, discipline, child development

I. ACKNOWLEDGEMENTS

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- Members of the *Global Families Project*
- IPUMS
- NICHD

II. THE SCOPE OF THE ISSUE

- UNICEF considers children globally to be in crisis: political violence, climate change, and poverty affect many children [1], [2].
- In this time of crisis, parenting is one crucial area of focus.
- According to UNICEF data,  $\frac{1}{3}$  of children are subject to physical punishment [3];  $\frac{2}{3}$  to some form of violent punishment [1].
- In a review of 50 years of literature on physical punishment, E. T. Gershoff and A. Grogan-Kaylor [4] connect physical punishment to poor mental health outcomes, and other poor outcomes over the life course. K. P. Ward, A. C. Grogan-Kaylor, J. Ma, G. Pace, and S. J. Lee [3] examines the relationship of multiple forms of parental discipline to child outcomes.

III. ARE WE SIMILAR? ARE WE DIFFERENT?



Figure 1: positive parenting

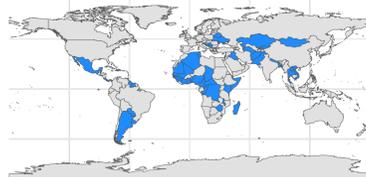


Figure 2: countries in MICS data

IV. BOTH UNIVERSALS AND VARIATION ARE IMPORTANT

"Despite the incredible diversity existing among and within human cultures, there are many phenomena that occur regularly in all known societies. These commonalities, or universals, while deriving in part from human nature, may also have specific social, cultural, and systemic sources. We need to develop a working understanding of these universals so that we might advance legitimate, empirically based human science set on creating knowledge that is politically relevant to fostering real solutions to the problems that complicate human co-existence in the Age of the Anthropocene." [5]

V. HIGHLIGHTING COMMONALITIES MAY PROMOTE INTERGROUP ATTITUDES AND SOLIDARITY

"P. H. P. Hanel, G. R. Maio, and A. S. R. Manstead [6] cite research suggesting that 'highlighting similarities between groups improves interpersonal and intergroup attitudes.' Others have argued that 'build[ing] bonds of commonality across our differences' might be an impetus for social transformation [7]."

VI. THE ARGUMENT OF THIS PRESENTATION

- Families, parents and children experience an incredible diversity of circumstances.
- Parents engage in parenting behaviors with consequent diversity, though with some surprising similarities.
- The associations of parenting with child outcomes are surprisingly consistent.

VII. DATA

MICS data collected by UNICEF from Low and Middle Income Countries (LMIC) around the world.  $N = 224,632$  families;  $N_{countries} = 60$



Figure 1: countries in UNICEF MICS Data

VIII. SOURCES OF VARIATION IN THE STUDY OF PARENTING AND CHILD OUTCOMES

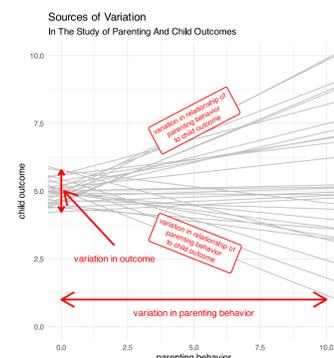


Figure 2: Sources of Variation In The Study of Parenting And Child Outcomes

IX. THE EQUATION

$$\text{outcome} = \beta_0 + \sum \beta \text{parenting} + \sum \beta \text{covariates} + u_{0j} + \sum u_{kj} \times \text{parenting}$$

Annotations:  $\beta_0$  is 'baseline';  $\sum \beta \text{parenting}$  is 'linear or dichotomous outcome';  $\sum \beta \text{covariates}$  is 'covariates';  $u_{0j}$  is 'country level variation in outcome';  $\sum u_{kj} \times \text{parenting}$  is 'country level variation in associations'; 'parenting' is 'parenting'.

Figure 3: annotated equation

X. PARENTING BEHAVIORS VARY SOMEWHAT ACROSS COUNTRIES

Verbal reasoning (78%) and shouting (64%) are the most common parental discipline behaviors toward young children.

XI. THE MAXIMAL MODEL APPROACH

- Hypothetically, one might imagine that there could be group level unobserved factors which affect many regression slopes—i.e. the relationship between multiple predictors (e.g.  $x_1, x_2, x_3$ , etc.) and outcome variable  $y$ .
- Arguably, were one to ignore these unobserved factors in statistical estimation, they would show up either in an error term ( $\epsilon_i$  or  $u_{0j}$ ), or in the regression coefficients ( $\beta$ ).
- The above could lead to statistical bias and a substantive mis-estimation of important effects. Thus, there is a conceptual argument for including as many random effects—i.e. random slopes—in a statistical model as possible [8], [9].
- There is also a substantive reason: We might be interested in the sizes of *all* the random slopes!

XII. RELATIONSHIP OF PARENTING AND CHILD OUTCOMES

Maximal Model of Parenting and Child Aggression Outcome

	aggress
child aggression	
Sex of randomly selected child	-0.023 **
Age of randomly selected child	0.000
Selected child shouted at	0.036 **
Selected child called dumb/lazy/names	0.054 **
Selected child shaken	0.039 **
Selected child spanked	0.023 **
Selected child hit/slapped on hand/arm/leg	0.033 **
Selected child hit with belt/brush/stick/etc	0.035 **
Selected child hit/slapped on face/head/ears	0.044 **
Selected child beat as hard as one could	0.026 **
Selected child's privileges taken away	0.007
Selected child - explained why behavior wrong	-0.014 *
Selected child given something else to do	0.004
Intercept	0.325 **
country	
var(d_psych_shout)	0.001
var(d_psych_names)	0.001
var(d_phys_shook)	0.001
var(d_phys_spank)	0.001
var(d_phys_hitslap)	0.001
var(d_phys_hitobject)	0.001
var(d_phys_hitface)	0.002
var(d_phys_beathard)	0.002
var(d_nvnd_privileges)	0.001
var(d_nvnd_explained)	0.001
var(d_nvnd_gave)	0.001
var(_cons)	0.012
Residual	
var(e)	0.217
Number of observations	224632

\*\* p<.01, \* p<.05

XIII. THE RELATIONSHIP OF PARENTING AND CHILD OUTCOMES SHOWS LITTLE VARIATION ACROSS COUNTRIES

i. A Standard Spaghetti Plot

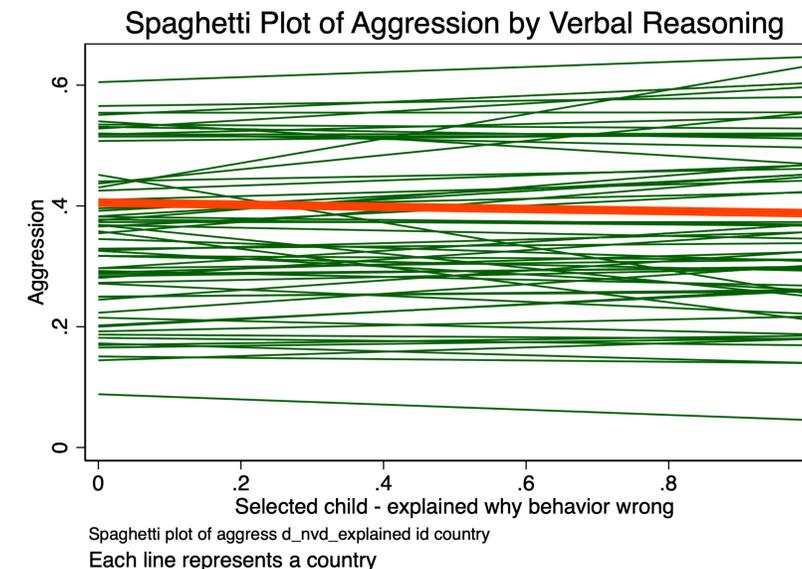


Figure 4: a standard 'spaghetti' plot

ii. A Modified Spaghetti Plot

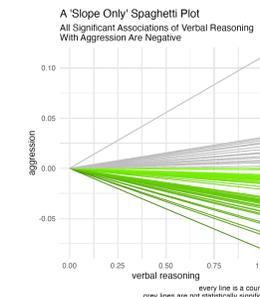


Figure 5: modified spaghetti plot

XIV. QUANTIFYING DIVERSITY AND COMMONALITY IN THE RELATIONSHIP OF PARENTING TO CHILD OUTCOMES

1. Regression slopes—when statistically significant—are all in the same direction, and of at least somewhat similar magnitude.
2. The actual values of the var ( $u_{kj}$ ) or range ( $u_{kj}$ ) are small.

XV. IMPLICATIONS

"My conception of the universal is that of a universal enriched by all that is particular, a universal enriched by every particular: the deepening and coexistence of all particulars." [10]

- Associations of parental discipline with child outcomes are very consistent across countries.
- This may be helpful to international organizations (e.g. UNICEF, WHO) that are developing programs or interventions that are to be applied in multiple cultural settings.
- While cultural tailoring will always be necessary to some degree; child development research can inform the foundations of widely applicable interventions.



Figure 6: Global Families Project

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