Journal of Experimental Psychology: General

ISSN: 0096-3445

2024, Vol. 153, No. 11, 2810–2821
https://doi.org/10.1037/xge0001664

Does Governmental Corruption Aid or Hamper Early Moral Development? Insights From the Dominican Republic and United States Contexts

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We tested whether children growing up in the Dominican Republic (D.R.), a context with relatively high governmental corruption levels, would support versus distance themselves from widespread unethical practices like bribery. In Experiment 1 (moral judgments; $n = 106$), D.R. elementary schoolers and adults evaluated judges who accepted gifts from contestants before or after selecting contest winners and predicted whether bribe-taking judges would be secretive. Like adults, older—but not younger—D.R. elementary schoolers differentially condemned judges who accepted gifts before versus after picking contest winners. Unlike adults, children often predicted that judges would disclose receiving gifts. In Experiment 2 (moral behaviors; $n = 44$), D.R. elementary schoolers could secretly accept or reject a bribe in exchange for 1st place while judging a drawing contest. All but two children rejected the bribe. Together, these findings stand in contrast with U.S. bribery-related developmental trends (Reyes-Jaquez & Koenig, 2021, 2022) and support this contention: When growing up in a more morally heterogeneous context like the D.R., children eventually assume a critical and differentiated stance toward—and will resist or subvert—some of their culture's unethical practices. Greater exposure to a wide range of unethical transactions might hinder aspects of bribery-related moral development early on, depending on how these aspects are measured (moral judgment vs. behavior). Nevertheless, over time, such exposure may strengthen children's capacity to resist unethical cultural practices, indicated by children's overwhelming rejection of bribes. We discuss the importance of including diverse response modalities (verbal, behavioral) when measuring psychological constructs in non-Western societies.

Public Significance Statement
This study advances the idea that heterogeneity in moral conduct, or exposure to a wider range of unethical transactions during childhood, fails to produce a skewed or lenient moral compass. That is, children who grow up in an environment of higher governmental corruption levels will resist and condemn their culture's widespread unethical practices, such as bribery. The self-perpetuating cycle of corruption is, thus, likely unrelated to the development of citizens' moral values in childhood.

Keywords: reciprocity, moral development, culture, corruption, Latin America

Supplemental materials: https://doi.org/10.1037/xge0001664.supp

Reciprocity is deeply embedded within human social relationships and institutions (e.g., Nowak, 2006). From early in life, people spontaneously help other individuals (e.g., Warneken & Tomasello, 2006), return others' favors, and motivate others—sometimes punitively—so that individuals also engage in reciprocity (e.g., Robbins & Rochat, 2011). Studies in psychology, anthropology, sociology, and economics speak to the universality of positive and negative reciprocal acts in different societies (see, e.g., Falk & Fischbacher, 2006; Gächter & Herrmann, 2009). Indeed, reciprocity is considered central to the sustainability of large-scale cooperation between genetically unrelated individuals (Axelrod & Hamilton, 1981; Leimar & Hammerstein, 2001), as well as foundational to the

This article was published Online First September 26, 2024.
Sarah Brown-Schmidt served as action editor.
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All data, analytic code, and research materials are immediately available upon request. Data were analyzed using IBM SPSS statistics, Version 20, IBM Corporation (2011). This study's design and its analysis were not preregistered.

Bolivar Reyes-Jaquez played a lead role in conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, supervision, and writing–original draft and an equal role in writing–review and editing. Melissa A. Koenig played a supporting role in conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, supervision, and writing–original draft and an equal role in writing–review and editing.

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development of human moral systems (e.g., Flack & De Waal, 2000; Gintis et al., 2008). Critically, in modern societies not all reciprocal exchanges are deemed prosocial, nor should they be encouraged, such as the offering of financial incentives to public officials in exchange for favors or privileges. Thus, on the one hand, the development of reciprocal exchanges might be present across societies; on the other hand, the ethicality of such exchanges often varies by cultural setting. These two facts suggest that any differences in the types of reciprocal behaviors exhibited across cultural groups might be driven by differences in relevant normative beliefs (e.g., whether taking bribes is considered the "smart" thing to do), as opposed to differences in the cognitive underpinnings of reciprocity.

Generally, given the complexity of interpersonal exchanges, developing humans face the challenges of learning to identify when reciprocity is expected by and from others—and when it is ethical versus unethical (i.e., in household, corporate, and/or governmental settings). In two experiments we examined the development of moral stances against bribery, a pernicious form of reciprocity, in children growing up in a culture like the Dominican Republic—which is characterized by relatively high levels of local and municipal governmental corruption.

Positive, Negative, and Corrupt Reciprocity

As children get older, they showcase both an increasing understanding of—and behaviors that indicate—positive, negative, and unethical reciprocity. For example, in the context of resource sharing, 3-year-olds but not 2-year-olds engage in positive reciprocity (i.e., rewarding someone for their past nice actions); that is, they consider a partner's previous sharing with them when deciding how much to share back (e.g., Warneken & Tomasello, 2013). Further, 5-year-olds but not 3-year-olds hold normatively "binding" expectations about reciprocity. Specifically, 5-year-olds evaluate more harshly individuals who fail to consistently match their behavior with a partner's behavior (e.g., not reciprocating the sharing of a large proportion; still giving back, but with fewer resources than were received; Wörle & Paulus, 2019; see also, House et al., 2013). Additionally, negative reciprocity (e.g., punishing someone for their past nasty actions) seems to be disassociated from positive reciprocity in childhood and may emerge earlier in life than positive reciprocity (see, e.g., Chernyak et al., 2019).

Bribery, particularly within the settings of social institutions, is an unethical form of positive reciprocity. After 7 or 8 years of age, children realize they can strategically evoke future reciprocity in others by being generous, such as when giving to their peers desirable gifts (e.g., Herrmann et al., 2019; Warneken et al., 2019). Further, when evaluating scenarios where an act of gift-giving is always successful, such as when judges accept gifts from a contestant either before versus after picking the contest winner, 6- to 8-year-old children are more condemning of judges who accept gifts pre-contest—and will predict secrecy from the judge regarding the gift (e.g., Reyes-Jaquez & Koenig, 2021). By 10 years of age, about three out of every four children in the United States who are placed in a judge's role will reject financial gifts offered directly to them by a contestant (Reyes-Jaquez & Koenig, 2022). Still, children's understanding of unethical reciprocity and its negative consequences is somewhat limited: When an act of gift-giving is not always successful (i.e., a judge may turn down a gift), 6- to 8-year-olds rate more favorably a contest judge who accepts versus rejects a financial gift from a contestant prior to judging the contest. In other words, favorable moral judgments can be present at this age notwithstanding the same participants' expectations that judges who accept gifts are more likely to pick their benefactor as winner, than judges who reject the contestant's gift (Reyes-Jaquez & Koenig, 2021). Moreover, elementary schoolers who, in the absence of an experimenter, accept bribes in exchange for granting a peer 1st place in a contest, spontaneously disclose the bribe to the experimenter—as if unaware of the reputational repercussions of bribe-taking (e.g., Muravska, 2014; Reyes-Jaquez & Koenig, 2022).

Heterogeneity in Ethical Conduct

There is significant diversity, both across contexts and among individuals within contexts, in the degree to which people exhibit ethical stances that are not well understood (e.g., it is unclear why some moral behaviors vary over the life span and across some contexts). One way to address this gap in knowledge is to examine moral constructs in settings with cultural features that are directly relevant to the phenomenon studied. That is, cultural approaches that identify regions in which human sociality operates in theoretically relevant ways (e.g., the presence of particular observable associations between interpersonal interactions and cultural norms) can provide uniquely valuable information about the suitability of existing theoretical models of psychological development. For instance, the role of collectivistic thinking (i.e., the prioritization of the group over the self) has been studied by comparing the moral choices of children living in countries in which people are predominantly individualistic (e.g., Canada) to the moral choices of children living in countries that value interdependence more (e.g., China; Fu et al., 2007). Such work indicated that children's decisions about lying to help a group at the expense of an individual varied as a function of the cultural setting.

The primary goal of the present study was to extend this culturally-informed approach by examining children's moral judgments and decision-making in the Dominican Republic (D.R.). This context is a theoretically interesting one for examining unethical reciprocity judgments and behaviors because, unfortunately, to this day the D.R. continues to exhibit relatively higher levels of governmental corruption (see, e.g., Corruption Perceptions Index, 2023)—and thus, more moral heterogeneity (i.e., greater range of moral behaviors and beliefs across more diverse situations) than contexts like the United States. This naturalistic setting in the D.R. served as a case study for cultures in which many children grow up, given the incidence of bribery around the world: Estimates suggest that about $1 trillion dollars are paid every year in bribes as a share of corporate sales or household incomes (Kaufmann, 2005). Considering that most societal initiatives to combat corruption are with adults (e.g., disclosure of conflicting interests, training on organizational ethical conduct), existing scholarship misses an opportunity to examine practices like bribery at their developmental roots. Studying bribery in childhood can help better understand the ways in which corruption-related preferences emerge, are learned, and potentially perpetuated. Further, identifying the age periods during which ethical dilemmas begin to appear can help inform the design of pedagogical initiatives that complement existing efforts in adulthood. Many children are often personally exposed to acts of bribery, such as when parents aim to improve behaviors like potty training, healthy eating, or avoiding public tantrums. Notably, only in some cultures might children's exposure extend into social institutional settings, such as when their parents must bribe a police

or transit officer in order to continue their road trip, or bribe a health officer so as to receive medical attention or access to hospital beds.

Study Hypotheses and Overview

The examples offered above are events people report experiencing. According to the Global Corruption Barometer (Global Corruption Barometer: Latin America & the Caribbean, 2019), on average up to 1 in 5 people in Latin America and the Caribbean who used a public service (e.g., police, courts, public hospitals, identity documents) in the previous 12 months had to pay a bribe—which equates to approximately 56 million people across that region. In the specific case of the D.R., up to 23% of Dominicans report having to pay bribes (Global Corruption Barometer: Latin America & the Caribbean, 2019). However, the potential impact of these experiences on moral development is not accounted for when testing samples from the "weirdest" people in the world (Henrich et al., 2010). Examining bribery-related moral stances in the D.R. enabled us to test theoretically relevant hypotheses concerning the role of contextual characteristics in shaping the nature and development of children's moral judgments. For instance, (H_1) to the extent that exposure to more diverse social contexts can increase positive attitudes toward related objects of study (see, e.g., Pauker et al., 2018; Reyes-Jaquez et al., 2021), it is possible that in contexts of greater moral heterogeneity people express more favorable views of acts like bribery—compared to contexts that are more morally homogenous (e.g., environments in which people rarely engage in unethical reciprocal behaviors, or these are not as publicized, like in the United States). However, instead of being merely products of their culture, individuals may assume critical stances toward—and attempt to resist or subvert—their own culture's norms and practices (e.g., Wainryb & Recchia, 2014). If so, (H_2) people in highly corrupt societies might opt to distance themselves, often and early in life, from unethical practices that are ultimately detrimental to their well-being. These two plausible patterns (a marked endorsement vs. rejection of bribes) can be tested starting in childhood, by charting the developmental trajectory of bribery-related judgments and behaviors.

To our knowledge, only one study with adult participants has examined the potential role of countries' corruption levels on unethical behavior via a public goods game. In work by Muthukrishna et al. (2017), players decided whether to contribute to a common pool. The pool was multiplied by a predetermined amount and then split between all members regardless of who had contributed. The results provided mixed evidence in support of the two plausible developmental trajectories: Adults who grew up in countries rated by Transparency International as higher in corruption levels were especially likely to accept bribes from other players while in a leadership role (i.e., when in charge of punishing noncontributors). Conversely, participants whose parents were the ones who grew up in more corrupt societies were instead very unlikely to accept bribes (Muthukrishna et al., 2017). Thus, the limited evidence with adults offers some support for the possibility that children in the D.R. may grow to accept bribes by adulthood but distance themselves from unethical reciprocal acts in early childhood. In the present study, we built on the methods used by Reyes-Jaquez and Koenig (2021, 2022) in the United States to test Dominican children's moral judgments and behaviors related to bribery. In Experiment 1 (moral judgments), Dominican children evaluated judges who accepted gifts from contestants either prior to or after having selected the winner of a contest. In Experiment 2 (moral behaviors), Dominican children acted as contest judges themselves and had an opportunity to accept or reject in secret a bribe from a contestant prior to picking the contest winner. In a final section of the article, we directly compare findings from the Dominican context to prior findings in the United States.

Experiment 1

The goals were to test (a) participants' moral judgments about gifts given as potential bribes to authority figures versus as gestures of appreciation and (b) whether children anticipate secrecy from authority figures who accept bribes. Participants heard stories about judges who were offered gifts by one of two contestants: Gifts were offered before or after the contest, with judges always accepting the gift. By the elementary school years, U.S. children predict gift-accepting judges are likely to reciprocate the favor to contestants and pick them as winners (Reyes-Jaquez & Koenig, 2021). If D.R. children also recognize such partiality and oppose bribery, they should give harsher ratings to judges who accept gifts before versus after contests.

Below, we report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study. All data, analysis code, and research materials are immediately available upon request. Data were analyzed using IBM SPSS statistics, Version 20, IBM Corporation (2011). This study's design and its analysis were not pre-registered.

Method

Participants

Participants were recruited in the Dominican Republic (D.R.). Fifty-six elementary schoolers (M = 9 years, 0 months; Mdn = 109 months; range = 6 years, 8 months–10 years, 11 months; 23 boys, 33 girls, majority of mixed racial heritage, middle-income) from local schools, and 50 adults from a local university participated. No demographic information was obtained as part of the adult data collection. Elementary schoolers were recruited for the study as during this age period children actively safeguard the preservation of related constructs including equality (e.g., Fehr et al., 2008; Shaw & Olson, 2012) and impartiality (e.g., Mills & Grant, 2009; Shaw & Olson, 2014).

To examine developmental changes between child participants, as well as between child and adult participants, a median split was used: Child participants were divided into younger (M = 8 years, 0 months) and older age groups (M = 10 years, 0 months). No power analysis was conducted a priori to estimate the sample size; instead, data collection was time-constrained to a trimester in the D.R. As a reference, a power analysis done a posteriori while employing a .05 statistical significance criterion indicated that 41 participants produced 85% power for detecting a medium-sized effect (Cohen's d = 0.49; calculated from U.S. elementary schoolers' propensity to take bribes compared to a chance distribution; see Reyes-Jaquez & Koenig, 2022, Experiment 2). Note that we also include confidence intervals, when applicable, to help interpret the results. Approval was obtained from a U.S. university's institutional review board and only participants who provided written consent were enrolled in the study.

Materials and Procedure

The study was conducted in a private space in participants' schools. All participants heard the same stories in Spanish about four different contests, each story involving two contestants and a judge (within-subjects; order randomized). For a sample full text of the stories, see, for example, Reyes-Jaquez and Koenig (2021, p. 6). On two trials, the judge accepted a gift from a contestant *before* choosing the winner (e.g., contestant: "Hi. … I brought this $500 *bond* [$10-dollar gift card local equivalent] from home, and I'd like you to have it!"). On two other trials, the judge accepted the same gift but *after* having chosen the contest winner. Please note that the rationale for making the gift-giver always the winner was to justify that a contestant may give a judge a gift after a contest. That way, depending on their timing, gifts could be interpreted as potential bribery (gifts-as-bribes trials) or gratitude (gifts-as-thanks trials). We also tested participants' predictions about public disclosure of the gifts (see prompts below). The contests were about cart-wheeling, story-telling, dancing, and singing (see, e.g., Mills & Keil, 2008; Reyes-Jaquez & Koenig, 2021). Before hearing the stories, participants were asked if they knew what contest judges and gift cards were, and an explanation was provided if needed. Participants' memory for story details was then tested and feedback provided; see online Supplemental Material for more details, including a sample script.

Moral Judgments. For each story, participants were asked: "Was it okay or not okay that the judge accepted the gift that the kid brought him/her?" Based on participants' initial response (i.e., okay/not okay), they were then asked: "And was it a little good/bad, pretty good/bad, or very, very good/bad that the judge did that?" Note that these prompts were always asked once participants learned about the winner of the contest, for both the gift-as-bribes and gift-as-thanks trials.

Disclosure Predictions. As stated in the introduction, children in the United States sometimes seem unaware of the likely reputational repercussions of bribe-taking (e.g., Muravska, 2014; Reyes-Jaquez & Koenig, 2022). To test whether this was also the case in the D.R., after each story, participants were asked: (1) "Will [contestant] tell her family about winning?" and (2) "Will the judge tell her friends about the gift she got?" We anticipated that predictions of a judge disclosing receiving a gift should vary by experimental condition, whereas a contestant disclosing winning should not.

Explanations. To explore participants' reasoning, after the last moral judgment trial they were asked why they thought the judge's actions were (not) okay (trial type counterbalanced).

Results and Discussion

Coding and Analyses

For moral judgments, participants' responses per trial (two trials per gift-timing condition) were coded on an ordinal 0–5 scale, with 0 = *very, very good*, and 5 = *very, very bad*. Thus, the higher the score, the harsher participants' ratings were. For disclosure prompts (two trials per gift-timing condition and agent type: contestant, judge), if participants responded that contestants would *not* tell about winning, or judges would *not* disclose that they accepted gifts, their responses were coded as 1, and 0 otherwise (binary repeated response). Thus, the more often a score of 1 was given, the more secrecy was predicted for judges and contestants. Participants' trial-by-trial responses were evaluated by trial type (gifts-as-bribes vs. gifts-as-thanks) and age group (adults, younger elementary schoolers, older elementary schoolers).

Moral Judgments

A repeated-measures ordinal logistic regression, with trial-by-trial responses as the dependent measure (range = 0–5, per trial), trial type (gifts-as-bribes vs. gifts-as-thanks) as the within-subjects factor, plus age group (adults, younger elementary schoolers, older elementary schoolers) as between-subjects factors was conducted. There was a Trial Type × Age Group interaction (see Table 1). Alpha-corrected post hoc follow-ups (new significance criterion: $p < .05/3$ or $p < .017$) indicated that adults and older elementary schoolers, but not younger elementary schoolers, rated judges' behaviors more harshly during gifts-as-bribes trials versus gifts-as-thanks trials (see Figure 1). Thus, only by the later elementary school years did Dominican children differentially condemn acts of unethical reciprocity. Please note that direct comparisons of the D.R. and U.S. data are available in a separate section right after Experiment 2.

Winner's Disclosure

A repeated-measures binary logistic regression, with trial-by-trial responses as the dependent measure (range = 0–1, per trial), trial type (gifts-as-bribes vs. gifts-as-thanks) as the within-subjects factor, plus age group (adults, younger elementary schoolers, older elementary schoolers) as between-subjects factors was conducted. There was only a main effect of trial type (see Table 1), with Dominicans expecting increased disclosure of victory when contestants had offered gifts as thanks. Generally, Dominican participants expected low levels of secrecy regardless of condition and age group (see Figure 2).

Judge's Disclosure

A repeated-measures binary logistic regression, with trial-by-trial responses as the dependent measure (range = 0–1, per trial), trial type (gifts-as-bribes vs. gifts-as-thanks) as the within-subjects factor, plus age group (adults, younger elementary schoolers, older elementary schoolers) as between-subjects factors was conducted. There was a Trial Type × Age Group interaction (Table 1). Alpha-corrected follow-ups ($p < .017$ criterion) indicated that only Dominican adults predicted ($M = 1.80$, $SE = .08$ vs. $M = 1.14$, $SE = .13$) that judges would be more secretive when gifts were accepted before choosing winners than afterward. Older Dominican children ($M = 1.00$, $SE = .16$ vs. $M = 1.04$, $SE = .16$) failed to differentiate between gift-timing conditions when evaluating judges' disclosure. The same was true for younger elementary schoolers ($M = 0.57$, $SE = .16$ vs. $M = 0.54$, $SE = .14$). Thus, elementary school D.R. children did not seem to infer that a judge would be all that concerned about any negative repercussions for disclosing contestants' gifts.

Explanations

Following the same coding scheme as Reyes-Jaquez and Koenig (2021), three independent coders classified Dominican children's explanations into one of three categories: (1) judge bias (i.e., alluding to changes produced by the gifts on judges' picks, etc.), (2) social bonding norms (i.e., pointing to social conventions related to gift-

Table 1
Modeling of Participants' Responses in Experiment 1

Parameter	*B*	*SE*	Hypothesis test: Wald χ^2	*df*	Significant	Exp (B)	95% Wald CI: *LL*	*UL*
Moral judgments: Main model								
Age group	−0.28	0.37	0.59	1	.444	0.75	0.37	1.55
Trial type	3.21	0.35	83.16	1	.000	24.80	12.44	49.44
Age × Trial Type	−2.74	0.43	39.77	1	.000	0.06	0.03	0.15
Moral judgments: Post hoc analyses								
Trial effect: Adults	3.24	0.44	53.38	1	.000	25.54	10.71	60.90
Trial: Older	1.27	0.32	15.90	1	.000	3.54	1.90	6.60
Trial: Younger	0.49	0.27	3.26	1	.071	1.64	0.96	2.81
Judge's disclosure: Main model								
Age group	1.29	0.44	8.69	1	.003	3.62	1.54	8.53
Trial type	−1.92	0.44	19.26	1	.000	0.15	0.06	0.35
Age × Trial Type	1.83	0.61	8.95	1	.003	6.21	1.88	20.54
Judge's disclosure: Post hoc analyses								
Trial effect: Adults	−1.92	0.44	19.26	1	.000	0.15	0.06	0.35
Trial: Older	0.07	0.24	0.09	1	.763	1.07	0.68	1.71
Trial: Younger	−0.09	0.43	0.04	1	.834	0.91	0.40	2.11
Winner's disclosure: Main model								
Age group	−0.61	0.80	0.59	1	.441	0.54	0.11	2.58
Trial type	−1.59	0.72	4.92	1	.027	0.20	0.05	0.83
Age × Trial Type	1.15	0.94	1.49	1	.222	3.15	0.50	19.87

Note. Adjusted significance criterion for post-hoc *Trial* effect calculations is $p < .017$. *SE* = standard error; *df* = degrees of freedom; Exp = exponentiated; CI = confidence interval; *LL* = lower limit; *UL* = upper limit.

giving, including friendship, niceness, etc.), and (3) other (i.e., not fitting the previous two categories).

All children provided explanations. Thirty children explained their judgments for a gift-as-bribe trial, of which 47% referenced judge bias (e.g., "Porque se lo dio para que la eligieran a ella no a la otra, es como si fuera a cambio de algo" ["Because she gave it to her so that she was picked and not the other; it's like an exchange of something"]), whereas 27% referenced social bonding norms (e.g., "Porque era su primera vez que hablaban y quería darle su regalo de amistad" ["Because it was the first time they had talked, and she wanted to give her a friendship gift"]). On the other hand, the remaining 26 children explained their reasoning for a gift-as-thanks trial, of which 39% referenced social bonding norms (e.g., "Porque el juez le dio la oportunidad de ganar, entonces parece que Pedro estuvo agradecido y le quizo devolver el favor" ["Because the judge gave him the opportunity to win, so it seems Pedro felt thankful and wanted to return the favor"]), whereas 4% referenced judge bias (e.g., "Porque eso se llama comprar, porque si tu le das el bono él te está agradeciendo que él ganó; es como si le pagara" ["Because that's called buying; if you give him the bond, he is thanking him for winning, it's like paying him"]). Trial type (gift before vs. after picking winner) predicted children's explanation type, $\chi^2(2, N = 56) = 13.40$, $p = .001$.

In summary, D.R. children seemed to showcase a distinct developmental trajectory in their bribery-related moral judgments of authority figures than what has been previously documented in Western settings (United States; Reyes-Jaquez & Koenig, 2021). That is, both a *later-emerging* condemnation of accepting gifts-as-bribes versus gifts-as-thanks (Figure 1), and *reduced* expectations of secrecy about receiving such gifts (Figure 2) relative to the U.S. context. Potential reasons for these developmental differences (e.g., cultural norms about secrecy) are addressed in the General Discussion.

Importantly, people's explicit judgments are not always predictive of their actual behaviors. That is, children's explicit judgments and behaviors can develop separately such that, depending on the domain examined, children's performance varies as a function of response modality. For example, in theory of mind and mathematical equivalence tasks children show a more mature understanding in their behavioral over verbal responses; conversely, in magical thinking and executive function tasks, children often demonstrate more mature understanding from verbalizations compared to performance (see, Woolley, 2006, for a review of these dissociations). Classic social psychology studies indicate that adults' verbal reports also may fail to match their own behaviors (see, e.g., Nisbett & Wilson, 1977, for a review)—including in the moral domain (e.g., Batson et al., 1999). Given this evidence, in Experiment 2 we tested whether, if given an opportunity to secretly accept a bribe offered by a contestant, Dominican children would actually accept or reject such an offer, as well as whether they would disclose it.

Experiment 2

The main goals were to examine (a) Dominican children's private decisions to accept or reject bribes and (b) any spontaneous disclosure of such bribes. Below, we report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study. All data, analysis code, and research materials are available upon request. Data were analyzed using IBM SPSS statistics. This study's design and its analysis were not preregistered.

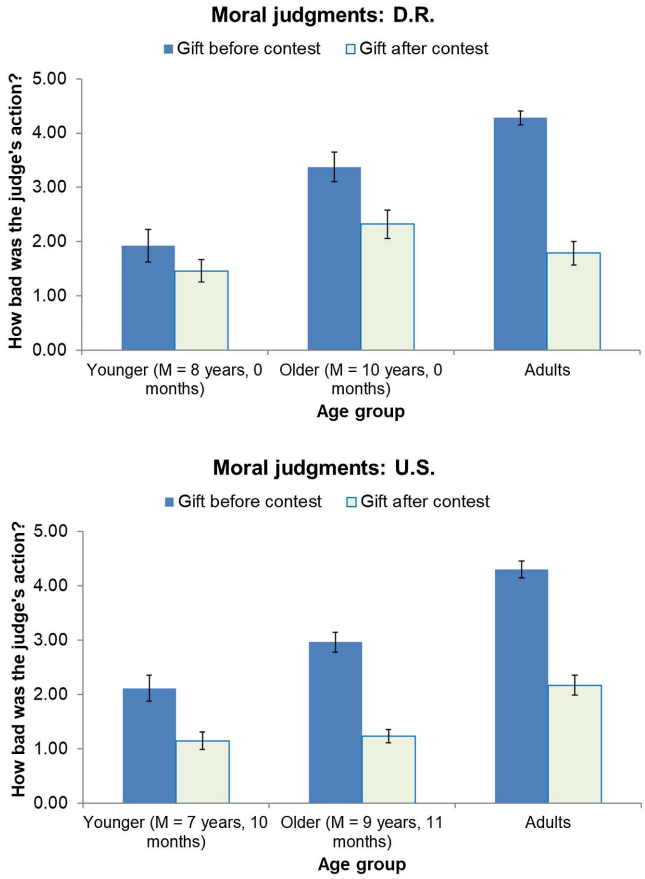
Method

Participants

Forty-four D.R. 6- to 11-year-old children (M = 9 years, 3 months; SE = 2 months; range = 6 years, 6 months–11 years, 3 months; 28 girls, 16 boys; majority middle-income population, of mixed racial heritage) were recruited from local schools with the help

Figure 1

Participants' Moral Judgments of Authority Figures Who Took Gifts as Bribes, by Gift-Timing Condition (Before vs. After Picking Winner)



Note. The top panel illustrates moral judgments from D.R. participants in Experiment 1, by age group (younger: Age *SE* = 1.59 months, range = 80–108 months; older: Age *SE* = 1.44 months, range = 109–131 months). The bottom panel shows U.S. participants' moral judgments in a comparable task, also by age group (younger: Age *SE* = 1.52 months, range = 80–106 months; older: Age *SE* = 1.32 months, range = 107–132 months). Error bars = *SE*. *SE* = standard error; D.R. = Dominican Republic. The bottom panel is from "The Development of a Morality Against Power Abuse: The Case of Bribery," by B. Reyes-Jaquez and M. A. Koenig, 2021, *Journal of Experimental Psychology: General, 150*(11), p. 2366 (https://doi.org/10.1037/xge0000926). Copyright 2021 by the American Psychological Association. See the online article for the color version of this figure.

of directors and teachers. No power analysis was conducted a priori to estimate the sample size; instead, data collection was time-constrained to a trimester in the D.R. As a reference, a power analysis done a posteriori while employing a .05 statistical significance criterion indicated that 41 participants produced 85% power for detecting a medium-sized effect (Cohen's $d = 0.49$; calculated from U.S. elementary schoolers' propensity to take bribes compared to a chance distribution; see, Reyes-Jaquez & Koenig, 2022, Experiment 2). Approval for this research was obtained from a U.S. university's institutional review board, and only participants who provided written consent were enrolled in the study.

Materials and Procedure

The study was conducted in a private space in participants' schools. Replicas sketched by a Dominican artist of the same three drawings featured in the Reyes-Jaquez and Koenig (2022) study served as stimuli. Participants were invited to help judge a drawing contest. The drawings consisted of a dog jumping a fence, with their quality varying significantly (see, Reyes-Jaquez & Koenig, 2022, for the drawings). The gifts used as bribes were bonds from Centro Cuesta Nacional (CCN; National Cuesta Center), the parent company of the largest toy store in the D.R. called Jugeton; these bonds were local equivalents to $10 gift cards, with their value matched via The Economist's Big Mac Index (2022). Jugeton toy store's logo is featured in these bonds, alongside the logos from other CCN stores. Children in the D.R. are familiar with these, as many private and public institutions provide their employees with CCN bonds as part of their Christmas Holiday pay.

The experimenter claimed that other children had sent in their drawings to participate in a contest and asked for participants' help. The experimenter showed participants three sealed envelopes and stated not having opened them yet. She explained that participants might find written notes from contestants, as the contestants were told they could write about themselves if they wanted to. The experimenter instructed participants to open the envelopes, read any note if included, and choose the best drawing as the winner. She then left the classroom and closed the door. The "effort" drawing was the best out of the three, and included the following note but in Spanish: "Hi this is Michel. I am sending my drawing because I like painting and winning! I worked really hard on my drawing so that it really is the best of the contest!" The "bribe" drawing was the second best, and included the following note alongside the financial incentive that was attached with a strong article clip: "Hi my name is Alex. I enjoy art so I wanted to send my drawing and win! I included a gift for you. You can keep it only if you pick me as the winner!" These notes were included to create the perception that both contestants had incurred a cost (i.e., temporal vs. financial). A third and worst drawing was included as a control without a note, expected not to be picked by children.

Winner Choice, Bribe Acceptance, Disclosure, Ratings. To test children's decisions to take or reject bribes, the experimenter waited outside the room until participants verbally notified her that they were done choosing the winner. She then opened the door, reentered the room, and asked participants for the winner (*winner choice*). The experimenter also discreetly recorded whether the gift was still there or now missing (*bribe acceptance*), and whether children spontaneously mentioned the gift (*bribe disclosure*). Lastly, children were asked to rate each of the drawings via a 10-point "stars" scale (*ratings*).

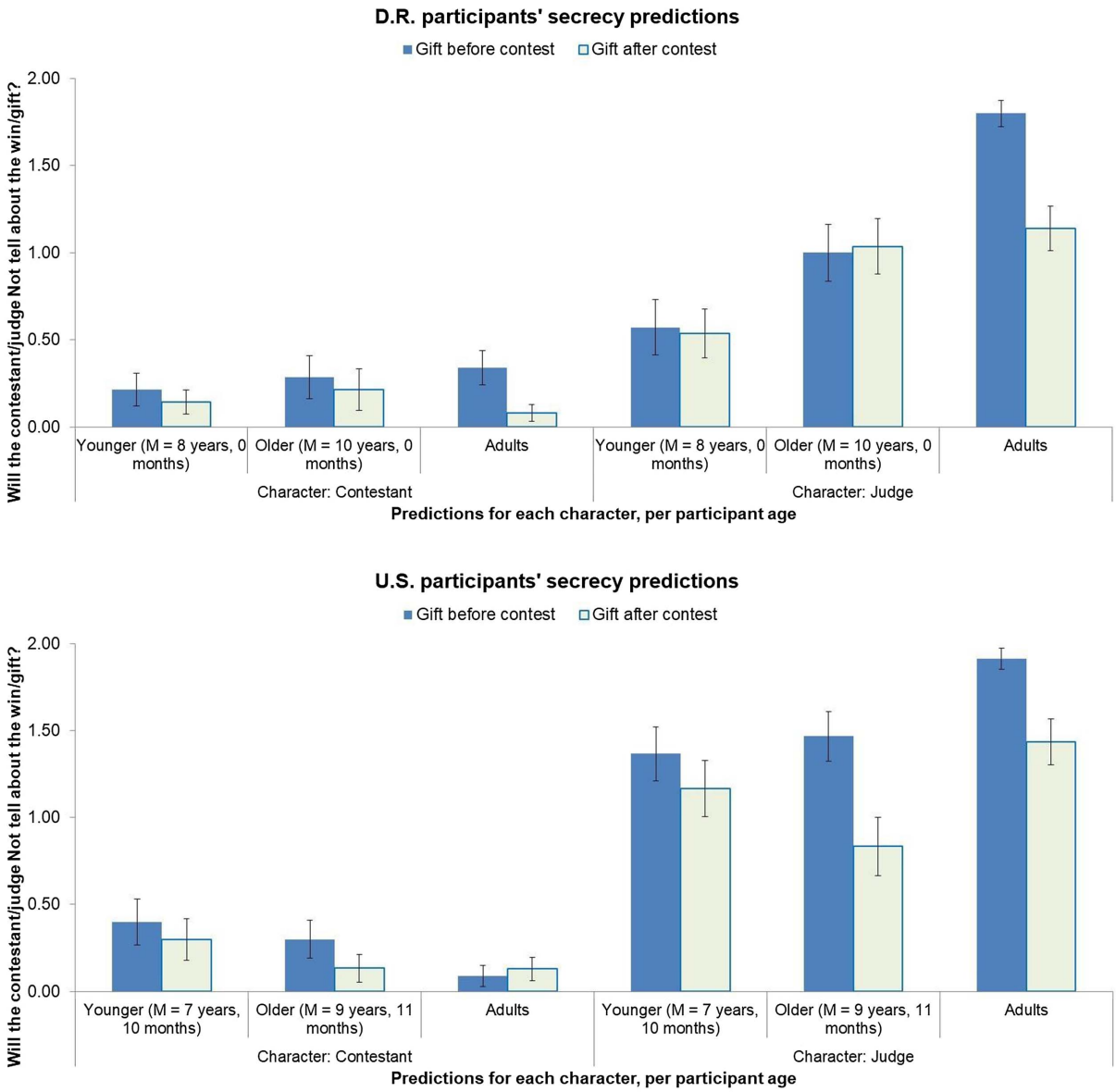
Results and Discussion

Bribe Acceptance

Only two out of 44 Dominican children, or ~5%, took the gift included by the contestant. A binary logistic regression with bribe acceptance (yes, no) as a function of child age in months produced no significant effect, Wald $\chi^2(1, 44) = 2.62$, $p = .11$. The two children who took the bribe were younger elementary schoolers ($M = 8$ years, 3 months, $SE = 2$ months).

Figure 2

Participants' Secrecy Judgments of Authority Figures Who Took Gifts as Bribes, by Gift-Timing Condition (Before vs. After Picking Winner)



Note. The top panel illustrates secrecy judgments from D.R. participants in Experiment 1, by age group (younger: Age *SE* = 1.59 months, range = 80–108 months; older: Age *SE* = 1.44 months, range = 109–131 months). The bottom panel shows U.S. participants' secrecy judgments in a comparable task, also by age group (younger: Age *SE* = 1.52 months, range = 80–106 months; older: Age *SE* = 1.32 months, range = 107–132 months). Error bars = *SE*. *SE* = standard error; D.R. = Dominican Republic. The bottom panel is from "The Development of a Morality Against Power Abuse: The Case of Bribery," by B. Reyes-Jaquez and M. A. Koenig, 2021, *Journal of Experimental Psychology: General, 150*(11), p. 2368 (https://doi.org/10.1037/xge0000926). Copyright 2021 by the American Psychological Association. See the online article for the color version of this figure.

Winner Choice

Generally, participants found the "effort" drawing more meritorious than the "bribe" drawing, with 61% of the children selecting the former over the latter (36%) as winner. One participant chose the control drawing as the winner. A binary logistic regression examining winner choice (effort, bribe) with age in months and children's bribe decision (take, leave) as predictors resulted in no significant effects for age, bribe decision, or the interaction term, $p > .10$, for all comparisons. A close inspection of winner choice per bribe decision showed that, out of the two children who took the gift, both picked the "bribe" drawing as winner. Meanwhile, out of those who did not take the gift

($n = 42$), one (2.4%) child picked the "control," 14 (33.3%) picked the "bribe," and 27 (64.3%) children selected the "effort" drawing as winner. A Fisher's Exact test did not produce any effect of bribe choice on winner pick (Fisher's test, $p = .13$).

Bribe Disclosure

We also kept track of whether children spontaneously reported to the experimenter the inclusion of a gift with the contestant's drawing. Seven children (16%) reported the gift. The two children who took the gift were among those who spontaneously disclosed it. The rate and nature of disclosure here are consistent with U.S. child counterparts (Reyes-Jaquez & Koenig, 2021).

Drawing Ratings

Overall, children rated higher the "effort" ($M = 8.20$, $SE = .31$) versus the control, $M = 5.75$, $SE = .29$; $t(43) = 6.80$, $p < .001$, drawing, but not higher than the "bribe", $M = 8.02$, $SE = .28$; $t(43) = 0.44$, $p = .66$, drawing. To measure children's relative drawing preference, we computed a differential score ("effort" drawing scores—"bribe" drawing scores; positive scores indicated an "effort" drawing preference, negative scores suggested a "bribe" drawing preference). This score was then analyzed via a linear regression with age and bribe decision as predictors, which produced no significant effects, $p > .15$, for all comparisons. We return to these findings in the General Discussion section (but see also below).

Relation Between Winner Choice and Drawing Ratings

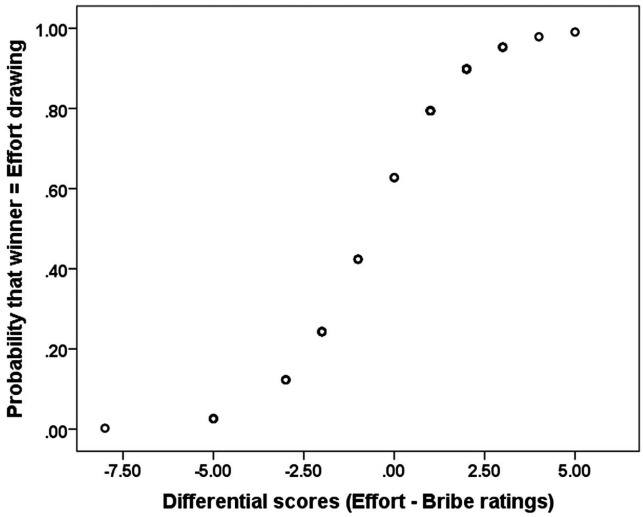
Given that children did not seem to distinguish between the "effort" and "bribe" drawings when rating them, we explored whether children's ratings were nevertheless associated with their winner choice. First, we calculated the correlation coefficients between ratings and choice; that is, whether ratings for each drawing in separate (effort, bribe) were linked to children's selection of the "effort" one as winner: The higher their ratings for a given drawing, the more [if drawing = effort: $r_s(41) = .50$, $p = .001$] or less [if drawing = bribe: $r_s(41) = -.58$, $p < .001$] likely children were to pick the "effort" one as winner.

Next, we tested whether children's relative preference of the "effort" over "bribe" drawing similarly predicted picking the "effort" drawing as winner. To this end, we used the same differential score as in the previous section (e.g., "effort" drawing scores−"bribe" drawing scores) as a predictor of winner choice (bribe, effort drawing), alongside children's bribe acceptance (yes, no) as predictors in a binomial logistic regression. This model produced only a significant main effect of relative drawing preference, $b = 0.96$, $SE = .28$, Wald $\chi^2(1, 43) = 11.75$, $p = .001$, Exp(B) = 2.60, CI [1.51, 4.49]. As seen in Figure 3, the more children favored in their ratings the "effort" over the "bribe" drawing (i.e., rated the former higher than the latter), the more likely they were to pick the "effort" drawing as winner. Together, these results suggest that children were actively engaged with the behavioral task.

Thus, when given the opportunity to engage in unethical reciprocity, nearly all Dominican children chose against it. Further, to the extent that children's high ratings of the "bribe" drawing reflected their true perception, as opposed to a gesture of kindness toward the contestant, then keeping the gift would have been even more enticing (i.e., vs. keeping the gift while concluding that the "effort" drawing was the clearly superior one). Despite their high rating of the "bribe" drawing, only two Dominican children took the bribe. Broadly, these findings suggest that across different cultural contexts, when having actual opportunities to accept bribes in private (i.e., in the absence of authority), elementary school children exhibit relatively low acceptance rates.

Figure 3

Predicted Probability of Picking as Winner the "Effort" Drawing as a Function of Children's Relative Drawing Preference (i.e., Differential Scores)



D.R. Versus U.S. Data Comparison

We also compared Dominican participants' bribery-related judgments and behaviors to those of their American counterparts reported in prior studies. Although cross-study comparisons must be interpreted cautiously, given that the U.S. and D.R. studies used similar materials, procedures, and test prompts, we considered the comparison justifiable and likely informative.

First, we compared Experiment 1's moral judgments via a repeated-measures ordinal logistic regression, with trial-by-trial responses as the dependent measure (range = 0–5, per trial), trial type (gifts-as-bribes vs. gifts-as-thanks) as the within-subjects factor, plus age group (adults, younger elementary schoolers, older elementary schoolers) and country (Dominican Republic, United States.) as between-subjects factors. This analysis produced various significant main effects (see online Supplemental Table S1), which were qualified by a significant Trial Type × Age Group × Country interaction, $b = -1.24$, $SE = .61$, Wald $\chi^2(1, 212) = 4.14$, $p = .042$, Exp(B) = 0.29, CI [0.09, 0.96]. To better understand this interaction, main effects of trial type were calculated for each Age Group × Country Combination (new significance criterion, $p = .008$ or .05/6): Adults and older elementary schoolers in the Dominican Republic and United States gave harsher ratings to judges who accepted gifts given as bribes versus gifts given as thanks ($p < .0001$, for all four comparisons; see Figure 1). However, younger elementary schoolers in the U.S. ($p < .0001$) but not in the D.R. ($p = .071$), significantly differentiated between the timing of gifts given to judges.

Next, we modeled participants' secrecy evaluations of judges (range = 0–1, per trial) via a repeated-measures binary logistic regression, with trial type as the within-subjects factor, plus age group and country as between-subjects factors. This analysis resulted in some significant main effects (see online Supplemental Table S2) qualified by a Trial Type × Age Group, $b = 1.73$, $SE = .75$, Wald $\chi^2(1, 212) = 5.26$, $p = .022$, Exp(B) = 5.62, CI [1.29, 24.59]: Older elementary schoolers and adults ($p < .008$), but not younger elementary schoolers ($p = .22$), expected more secrecy from judges who accepted gifts before versus after picking a winner (Figure 2). There was also a Country × Age Group interaction that did not meet the significance criterion, $b = -1.06$, $SE = .62$, Wald $\chi^2(1, 212) = 2.95$, $p = .086$, Exp(B) = 0.35, CI [0.10, 1.16], but which we explored for theoretical reasons; post hoc tests indicated that only for younger elementary schoolers was there a significant difference in secrecy judgments between countries, across trial type ($p = .001$; Figure 2)—with D.R. children expecting more disclosure from gift-accepting judges than U.S. children.

In addition, we explored the potential relationship between participants' moral judgments and secrecy evaluations for gift-as-bribe trials, via Spearman correlations (new significance criterion, $p = .05/6$ or .008, after corrections to alpha). For U.S. adults ($r_s = .52$, $p = .0002$) and older D.R. children ($r_s = .52$, $p < .0001$), the more harshly they as participants rated gift-taking by judges, the more secrecy they also expected from said judges. No other comparison met the significance threshold. Thus, across cultures, participants' moral and secrecy ratings were often dissociated, in that for four out of six age groups, correlations between tasks were not significant.

Separately, we also compared Experiment 2's moral behaviors between cultures via a binary logistic regression, with bribe acceptance (yes, no) as the dependent measure, plus child age and country as the between-subjects factors. This analysis resulted in only a significant effect of country, $b = -1.90$, $SE = .81$, Wald $\chi^2(1, 94) = 5.55$, $p = .018$, CI [0.03, 0.73]; D.R. children accepted substantially fewer bribes (5%) than did U.S. children (28%). Notably, when focusing on children who did not take the bribe—for whom accepting the deal was likely not okay—there was no difference between cultures in the proportion of children who actually denounced the briber: 13.5% of Dominicans versus 20% Americans; Fisher's Exact test, $p = .75$. This suggests that D.R. children themselves do not necessarily believe less in secrecy than their U.S. counterparts—even though younger D.R. children do expect third-party authority figures (e.g., judges in Experiment 1) to be less discreet about gifts than younger U.S. children.

Transparency and Openness

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study. All data, analytic code, and research materials are immediately available upon request. Data were analyzed using IBM SPSS statistics, Version 20, IBM Corporation (2011). This study's design and its analysis were not preregistered.

General Discussion

The main goal of the present study was to chart the developmental trajectory of stances against unethical reciprocity in a more morally heterogeneous context such as the Dominican Republic—as indicated by the country's relatively high levels of corruption. To this end, in two experiments we tested Dominican children's moral judgments (Experiment 1) and behaviors (Experiment 2) related to bribery. Overall, by the later childhood years, similar to children in the United States., D.R. children gave harsher ratings to judges who accepted gifts prior to versus after picking the contest winner. However, some important differences emerged when compared to other patterns previously found in the United States., especially among the younger age group (i.e., 8 years of age, see also Reyes-Jaquez & Koenig, 2021). First, whereas younger U.S. children systematically differentiated between gift-timing conditions when evaluating the judges' actions, younger Dominicans did not, only older elementary schoolers did. Second, while younger U.S. children in the Reyes-Jaquez and Koenig study (2021) predicted that judges who accepted gifts would be differentially secretive, younger Dominican children instead expected that judges who received gifts would be rather open about it. Thus, both in their moral judgments and disclosure predictions, children growing up in the Dominican context evaluated judges in meaningfully different ways. Eventually, as reflected in Dominican adults' responses, moral and secrecy judgments become comparable across these two cultural settings. Critically, when we tested children's actual moral behaviors in Experiment 2, instead of their moral judgments of third-party authority figures, Dominican children nearly always rejected financial incentives offered directly to them as bribes, outperforming their U.S. counterparts (Reyes-Jaquez & Koenig, 2022).

Does Corruption Aid or Hamper Moral Development?

As stated in the introduction, two possibilities were considered based on the culture we examined: It was plausible that in such settings of greater moral heterogeneity, children could (H_1) endorse cultural trends and thus favor acts like bribery (Pauker et al., 2018). Conversely, given that people are not merely products of their culture, children could instead (H_2) take critical stances toward—and attempt to resist or subvert—their own culture's norms (Wainryb & Recchia, 2014). At first glance, findings from Experiment 1 and Experiment 2 may seem contradictory, with each experiment potentially supporting one of these hypotheses. However, note that Experiment 1 did not necessarily provide evidence that younger D.R. children were more supportive of bribe-taking (H_1) than their U.S. counterparts. Instead, Experiment 1 showed that younger D.R. children did not *discriminate* between conditions, evaluating similarly the acceptance of gifts given before versus after a favor was received. Indeed, when comparing Experiment 1's younger elementary schoolers' evaluations of the gift-as-bribes trials only, younger D.R. and U.S. children were equally critical (i.e., no effect of country; $U = 384$, $p = .57$, see Figure 1). Further, Experiment 1's older elementary schoolers were more critical of judges who accepted gifts as *thanks* in the Dominican Republic compared to children in the United States, $U = 230$, $p = .003$, see Figure 1—as if with age, they have become hypervigilant of gift exchanges. These findings, alongside those of Experiment 2, offered more support for H_2 (rejection of local practices) than they do for H_1 (endorsement of practice). Specifically, results across the two experiments suggested that, to the extent that growing up in a more morally heterogeneous context impacts moral development, it does so by initially hindering children's *sensitivity* to important cues for determining ethicality, like what makes an event a quid pro quo (e.g., the transaction's timing: benefit first, favor second). Neither in their moral judgments nor own moral choices, did D.R. children exhibit more moral leniency about the acceptance of gifts than their

U.S. counterparts; if anything, D.R. children sometimes seemed to respond more negatively to gift-taking.

These data alone cannot fully explain exactly why younger D.R. children failed to distinguish between gift-timing conditions. One possibility is that, because Dominicans are more frequently exposed to a range of acts linked to corruption (e.g., repeatedly witnessing or hearing about authority figures such as parents and police officers becoming involved in "paying to play" transactions), it could take longer for children to gather the necessary experiences that will help them evaluate such acts *differentially*. That is, it likely takes more exposure to learn that for certain acts to become normatively sanctioned and damaging to one's reputation, it depends primarily on the timing of the transaction (e.g., before or after a favor is received). As the data shows, by the later elementary school years, even D.R. children seem to grasp such a distinction. Future work is needed to test what mechanisms may facilitate this developmental transition.

Moral Versus Secrecy Evaluations

Another interesting cross-cultural pattern was the frequent lack of association between participants' moral and secrecy judgments. Typically, because bribery and other unethical acts can negatively affect a person's reputation when discovered, they are kept secret, rather than talked about openly (e.g., Muravska, 2014). It follows that, to the extent that one considers an act to be unethical, the expectation should be that it is kept secret. Curiously, except for U.S. adults and older D.R. children, here participants' moral evaluations of judges' gift-taking were not linked to their predictions of judges' gift disclosure.

One possibility is that the two measures commanded different inferences in participants, namely, what people usually do (descriptive local norms) versus what people should or not do (injunctive local norms). This would explain why, when asked whether the judge *would* disclose the gift, younger elementary schoolers in the United States expected much secrecy, while D.R. children little. In contrast, younger elementary schoolers in both cultures gave similarly harsh ratings on gift-as-bribe trials. A complementary explanation as to why these two evaluations often were not correlated is that children's reputational understanding around gifting-related norms of secrecy may have a protracted developmental trajectory. That is, it might take longer for children to grasp that when authority figures and public officials accept some gifts it can affect their reputation negatively. This realization appears to develop separately from a reputational understanding based on norms of generosity, as documented in distributive settings (e.g., Engelmann et al., 2013). A third possibility is that, because in contexts like the D.R., where there is more exposure to people regularly talking about bribery and pay-to-play situations, children may surmise that it is okay to talk about gift-taking. That is, to the extent that D.R. children hear people in their families talk openly about gift-giving in a variety of situations, then they face the challenge of figuring out who specifically needs to keep quiet and when. Future work is needed to directly test these various possibilities.

Implications for Learning (About) Diversity

Broadly, the findings here highlight two key opportunities for improvement in psychological and diversity science. The first one is a need for more research that mindfully identifies specific cultural features relevant to the phenomenon being studied, in addition to ongoing work that contributes primarily post hoc interpretations of any observed cultural variation (some of our studies included). This will help further extend our understanding of how diverse contexts shape the human development of millions of individuals whose experiences are currently underrepresented or misunderstood in scientific work (e.g., García Coll et al., 1996; Syed et al., 2018)—including their moral learning in settings that feature more heterogeneous ethical conduct. In our view, embracing this first opportunity requires abandoning ultimately unhelpful approaches such as culture-as-deficit perspectives in favor of strengths-based models (e.g., Rogoff et al., 2017) and being vigilant about the possibility that some of the differences observed in cultural work may not be produced by "deep psychological differences" but by distinct interpretations of a situation (e.g., Baumard & Sperber, 2010).

A case in point, as well as a transition into opportunity no. 2, is how our study benefited from including not only cross-cultural comparisons but also diverse modalities of response when testing D.R. children's moral stances—namely, explicit judgments of third parties (Experiment 1) and actual moral behaviors (Experiment 2). Had we only included explicit judgment measures and adopted a culture-as-deficit perspective, it would have been reasonable to conclude that children's moral learning is mainly hindered by exposure to environments with high levels of corruption. However, as suggested by children's behavioral choices in Experiment 2 and cross-cultural comparisons of children's judgments in Experiment 1, the story is not as simple. For example, when given an option to keep a bribe in secret, approximately 5% of Dominican elementary schoolers chose to do so, compared to 28% of U.S. elementary schoolers who did the same under comparable circumstances (see, Reyes-Jaquez & Koenig, 2022, Experiment 2). Moreover, children in the United States and Dominican Republic gave comparable ratings during gift-as-bribe trials. Together, these patterns highlight the importance of including diverse response modalities to examine psychological phenomena in different societies.

Future Directions and Limitations

Future directions include examining whether culture influences the way in which children interpret a wide variety of unethical practices. For example, though corruption is often linked to personal or corporate greed, engaging in acts like bribery can say more about the collapse of social institutions than about the moral backbone of citizens—with bribes representing a last resort for many to ensure their survival (e.g., McMann, 2014). It is then possible that in contexts such as the D.R., children may bring greater empathy to people who resort to bribing. This might help explain patterns such as children in Experiment 2 rating the "bribe" drawing as favorably as they did the "effort" one. Indeed, children's favorably high ratings of the "bribe" drawing seemed to reflect a gesture of kindness toward that contestant rather than their self-interest—otherwise it would have been very compelling to pick the "bribe" drawing as winner given the extra financial incentive it came with. Future research may test this possibility.

Other potential directions stem from the methodological limitations of the present studies; that is, future work can more directly test potential psychological underpinnings driving some of the cultural differences we documented. For instance, what are the specific mechanisms for transmission of moral knowledge in cultures of greater moral heterogeneity? Are parents in more corrupt contexts more likely to talk with their children about ethical topics—and to do so in

meaningfully different ways—than parents living in less corrupt settings? Further, is experiencing or witnessing firsthand the negative side of bribery a requirement for children to assume anticorruption stances, or is it enough to have heard about it from others? What happens when children are given an opportunity not only to accept or reject, but to extend bribes themselves (e.g., as contestants)? When is it or not appropriate to compare absolute responses on scales, such as the ones implemented here, across cultural settings? In our view, these and related inquiries represent fruitful avenues for a line of work that can help provide a more global and inclusive view of moral development—one that better represents the experiences of millions of children living in majority-world settings.

Conclusions

Children growing up in societies with greater moral heterogeneity—as indicated by higher corruption levels—such as the Dominican Republic, may initially fail to differentially condemn and expect secrecy from authority figures engaging in acts of unethical reciprocity. However, by the late elementary school years, children's moral judgments will match—while their moral behaviors may outperform—those of their counterparts who grow up in more morally homogeneous societies like the United States (e.g., Reyes-Jaquez & Koenig, 2021, 2022). Together, these findings support the contention that, when exposed to a diversity of morally-relevant exemplars, children eventually will assume a critical and differentiated stance toward—and attempt to resist or subvert—some of their culture's unethical norms and practices (e.g., Wainryb & Recchia, 2014). Further, the results suggest that exposure to high corruption levels might hinder the rate of some aspects of bribery-related moral development early on (e.g., differentiated moral judgments). However, over time, such contexts may also help strengthen children's stances against relevant unethical cultural practices as they begin to reason more critically about them—and, arguably, to witness or experience some of their more pernicious consequences.

Finally, our findings may encourage future work to embrace the idea that psychological science can be further strengthened by comparing cultural contexts specifically selected based on theoretically relevant constructs. This approach has been effective in producing unique insights (see, e.g., Fu et al., 2007; Muthukrishna et al., 2017; Olson et al., 2012; Reyes-Jaquez et al., 2021; Shutts et al., 2011) while helping to test the generalizability and suitability of prominent theoretical frameworks mainly grounded in Western samples.

References

Axelrod, R., & Hamilton, W. D. (1981). The evolution of cooperation. *Science*, *211*(4489), 1390–1396. https://doi.org/10.1126/science.7466396

Batson, C. D., Thompson, E. R., Seuferling, G., Whitney, H., & Strongman, J. A. (1999). Moral hypocrisy: Appearing moral to oneself without being so. *Journal of Personality and Social Psychology*, *77*(3), 525–537. https://doi.org/10.1037/0022-3514.77.3.525

Baumard, N., & Sperber, D. (2010). Weird people, yes, but also weird experiments. *Behavioral and Brain Sciences*, *33*(2–3), 84–85. https://doi.org/10.1017/S0140525X10000038

Big Mac Index. (2022). *The economist*. https://www.economist.com/big-mac-index

Chernyak, N., Leimgruber, K. L., Dunham, Y. C., Hu, J., & Blake, P. R. (2019). Paying back people who harmed us but not people who helped us: Direct negative reciprocity precedes direct positive reciprocity in early development. *Psychological Science*, *30*(9), 1273–1286. https://doi.org/10.1177/0956797619854975

Corruption Perceptions Index. (2023). *Transparency international*. https://www.transparency.org/en/cpi/2023

Engelmann, J. M., Over, H., Herrmann, E., & Tomasello, M. (2013). Young children care more about their reputation with ingroup members and potential reciprocators. *Developmental Science*, *16*(6), 952–958. https://doi.org/10.1111/desc.12086

Falk, A., & Fischbacher, U. (2006). A theory of reciprocity. *Games and Economic Behavior*, *54*(2), 293–315. https://doi.org/10.1016/j.geb.2005.03.001

Fehr, E., Bernhard, H., & Rockenbach, B. (2008). Egalitarianism in young children. *Nature*, *454*(7208), 1079–1083. https://doi.org/10.1038/nature07155

Flack, J. C., & De Waal, F. B. (2000). "Any animal whatever": Darwinian building blocks of morality in monkeys and apes. *Journal of Consciousness Studies*, *7*(1–2), 1–29.

Fu, G., Xu, F., Cameron, C. A., Leyman, G., & Lee, K. (2007). Cross-cultural differences in children's choices, categorizations, and evaluations of truths and lies. *Developmental Psychology*, *43*(2), 278–293. https://doi.org/10.1037/0012-1649.43.2.278

Gächter, S., & Herrmann, B. (2009). Reciprocity, culture and human cooperation: Previous insights and a new cross-cultural experiment. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, *364*(1518), 791–806. https://doi.org/10.1098/rstb.2008.0275

García Coll, C., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Vázquez García, H. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development*, *67*(5), 1891–1914. https://doi.org/10.2307/1131600

Gintis, H., Henrich, J., Bowles, S., Boyd, R., & Fehr, E. (2008). Strong reciprocity and the roots of human morality. *Social Justice Research*, *21*(2), 241–253. https://doi.org/10.1007/s11211-008-0067-y

Global Corruption Barometer: Latin America and the Caribbean. (2019). *Transparency international*. https://www.transparency.org/en/gcb/latin-america/latin-america-and-the-caribbean-x-edition-2019

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, *33*(2–3), 61–83. https://doi.org/10.1017/S0140525X0999152X

Herrmann, E., Engelmann, J. M., & Tomasello, M. (2019). Children engage in competitive altruism. *Journal of Experimental Child Psychology*, *179*, 176–189. https://doi.org/10.1016/j.jecp.2018.11.008

House, B., Henrich, J., Sarnecka, B., & Silk, J. B. (2013). The development of contingent reciprocity in children. *Evolution and Human Behavior*, *34*(2), 86–93. https://doi.org/10.1016/j.evolhumbehav.2012.10.001

IBM Corporation. (2011). *IBM SPSS statistics for windows* (Version 20.0) [Computer software].

Kaufmann, D. (2005). *Myths and realities of governance and corruption*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=829244

Leimar, O., & Hammerstein, P. (2001). Evolution of cooperation through indirect reciprocity. *Proceedings of the Royal Society B: Biological Sciences*, *268*(1468), 745–753. https://doi.org/10.1098/rspb.2000.1573

McMann, K. M. (2014). *Corruption as a last resort: Adapting to the market in Central Asia*. Cornell University Press.

Mills, C. M., & Grant, M. G. (2009). Biased decision-making: Developing an understanding of how positive and negative relationships may skew judgments. *Developmental Science*, *12*(5), 784–797. https://doi.org/10.1111/j.1467-7687.2009.00836.x

Mills, C. M., & Keil, F. C. (2008). Children's developing notions of (im)partiality. *Cognition*, *107*(2), 528–551. https://doi.org/10.1016/j.cognition.2007.11.003

Muravska, J. (2014). *How to bribe: A typology of bribe paying and how to stop it*. Transparency International.

Muthukrishna, M., Francois, P., Pourahmai, S., & Henrich, J. (2017). Corrupting cooperation and how anti-corruption strategies may backfire. *Nature Human Behaviour*, *1*(7), Article 138. https://doi.org/10.1038/s41562-017-0138

Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, *84*(3), 231–259. https://doi.org/10.1037/0033-295X.84.3.231

Nowak, M. A. (2006). Five rules for the evolution of cooperation. *Science*, *314*(5805), 1560–1563. https://doi.org/10.1126/science.1133755

Olson, K. R., Shutts, K., Kinzler, K. D., & Weisman, K. G. (2012). Children associate racial groups with wealth: Evidence from South Africa. *Child Development*, *83*(6), 1884–1899. https://doi.org/10.1111/j.1467-8624.2012.01819.x

Pauker, K., Carpinella, C., Meyers, C., Young, D. M., & Sanchez, D. T. (2018). The role of diversity exposure in Whites' reduction in race essentialism over time. *Social Psychological and Personality Science*, *9*(8), 944–952. https://doi.org/10.1177/1948550617731496

Reyes-Jaquez, B., Escala, M. J., & Bigler, R. S. (2021). When multiracial individuals are the numerical majority: Children's racial attitudes in the Dominican Republic. *Developmental Psychology*, *57*(5), 662–677. https://doi.org/10.1037/dev0001052

Reyes-Jaquez, B., & Koenig, M. A. (2021). The development of a morality against power abuse: The case of bribery. *Journal of Experimental Psychology: General*, *150*(11), 2362–2374. https://doi.org/10.1037/xge0000926

Reyes-Jaquez, B., & Koenig, M. A. (2022). Greasing (small) palms: Early rejection of bribery. *Child Development*, *93*(5), e531–e546. https://doi.org/10.1111/cdev.13814

Robbins, E., & Rochat, P. (2011). Emerging signs of strong reciprocity in human ontogeny. *Frontiers in Psychology*, *2*, Article 353. https://doi.org/10.3389/fpsyg.2011.00353

Rogoff, B., Coppens, A. D., Alcalá, L., Aceves-Azuara, I., Ruvalcaba, O., López, A., & Dayton, A. (2017). Noticing learners' strengths through cultural research. *Perspectives on Psychological Science*, *12*(5), 876–888. https://doi.org/10.1177/1745691617718355

Shaw, A., & Olson, K. (2014). Fairness as partiality aversion: The development of procedural justice. *Journal of Experimental Child Psychology*, *119*, 40–53. https://doi.org/10.1016/j.jecp.2013.10.007

Shaw, A., & Olson, K. R. (2012). Children discard a resource to avoid inequity. *Journal of Experimental Psychology: General*, *141*(2), 382–395. https://doi.org/10.1037/a0025907

Shutts, K., Kinzler, K. D., Katz, R. C., Tredoux, C., & Spelke, E. S. (2011). Race preferences in children: Insights from South Africa. *Developmental Science*, *14*(6), 1283–1291. https://doi.org/10.1111/j.1467-7687.2011.01072.x

Syed, M., Santos, C., Yoo, H. C., & Juang, L. P. (2018). Invisibility of racial/ethnic minorities in developmental science: Implications for research and institutional practices. *American Psychologist*, *73*(6), 812–826. https://doi.org/10.1037/amp0000294

Wainryb, C., & Recchia, H. (2014). Moral lives across cultures: Heterogeneity and conflict. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 259–278). Psychology Press. https://doi.org/10.4324/9780203581957.ch12

Warneken, F., Sebastián-Enesco, C., Benjamin, N. E., & Pieloch, K. A. (2019). Pay to play: Children's emerging ability to use acts of generosity for selfish ends. *Journal of Experimental Child Psychology*, *188*, Article 104675. https://doi.org/10.1016/j.jecp.2019.104675

Warneken, F., & Tomasello, M. (2006). Altruistic helping in human infants and young chimpanzees. *Science*, *311*(5765), 1301–1303. https://doi.org/10.1126/science.1121448

Warneken, F., & Tomasello, M. (2013). The emergence of contingent reciprocity in young children. *Journal of Experimental Child Psychology*, *116*(2), 338–350. https://doi.org/10.1016/j.jecp.2013.06.002

Woolley, J. D. (2006). Verbal-behavioral dissociations in development. *Child Development*, *77*(6), 1539–1553. https://doi.org/10.1111/j.1467-8624.2006.00956.x

Wörle, M., & Paulus, M. (2019). Normative foundations of reciprocity in preschoolers. *Journal of Experimental Child Psychology*, *188*, Article 104693. https://doi.org/10.1016/j.jecp.2019.104693

Received February 15, 2023
Revision received July 29, 2024
Accepted July 29, 2024 ■