

Punishment or Restoration? The Role of Group Bias and Harsh Nurturing on Children's Preference*

¿Castigo o Restauración? El rol del sesgo grupal y la crianza severa en las preferencias de los niños

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ABSTRACT

Research on conflict resolution has long examined preferences for retributive or restorative responses to injustice, yet the role of group affiliation and parental practices in shaping these orientations remains unclear. This study investigated 7- to 12-year-old children's (n = 64) restorative behaviors as third-party bystanders of distributive transgressions. Participants were assigned to ingroup or outgroup conditions and presented with vignettes depicting transgressions. Using semantic differentials and questionnaires, we assessed justice preferences and child authoritarianism; caretakers reported on the severity and frequency of corporal punishment. Findings showed a clear preference for restoration over retribution. Group bias influenced restorative behavior: children engaged in more complex restorative strategies with ingroup than outgroup transgressors. These results challenge the assumption that punishment is the default response to transgressions and highlight the diversity of children's justice behaviors. The study underscores the role of group comparison in activating bias and questions the relevance of authoritarianism at this developmental stage. Implications concern the developmental pathways of justice orientation and the influence of nurturing practices in shaping children's preferences.

Keywords

restorative justice; retributive justice; black sheep effect, corporal punishment, authoritarianism.

RESUMEN

La investigación sobre resolución de conflictos ha examinado las preferencias por respuestas retributivas o restaurativas frente a la injusticia; pero el papel de la afiliación grupal y de las prácticas parentales en la formación de estas orientaciones no es claro. Este estudio investigó

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las conductas restaurativas de participantes de 7 a 12 años ($n = 64$) como terceros observadores de transgresiones distributivas. Los participantes fueron asignados a condiciones de endogrupo o exogrupo y se les presentaron viñetas que mostraban transgresiones. Mediante diferenciales semánticos y cuestionarios, se evaluaron las preferencias de justicia y el autoritarismo infantil; los cuidadores reportaron la severidad y frecuencia del castigo corporal. Los resultados mostraron una clara preferencia por la restauración sobre la retribución. El sesgo grupal influyó en la conducta restaurativa: los participantes recurrieron a estrategias restaurativas más complejas con transgresores del endogrupo que del exogrupo. Estos hallazgos cuestionan la idea de que el castigo sea la respuesta predeterminada a las transgresiones y destacan la diversidad de conductas de justicia en la infancia. El estudio resalta el papel de la comparación grupal en la activación del sesgo y cuestiona la relevancia del autoritarismo en esta etapa del desarrollo. Las implicaciones se centran en las trayectorias del desarrollo de la orientación hacia la justicia y en la influencia de las prácticas de crianza en la formación de las preferencias infantiles.

Palabras clave

justicia restaurativa; justicia retributiva; efecto de la oveja negra; castigo corporal; autoritarismo.

Introduction

Across cultures, justice mechanisms have sought to promote cooperation and social well-being (Cohen, 1991; Lodi et al., 2021; Peterson & Seligman, 2004; Tyler, 2010). In Colombia, this includes both punitive measures such as imprisonment (Penal Code, Act 599/2000, art. 4) and alternative dispute resolution. The effectiveness of these mechanisms depends on victims' preferences (Wenzel et al., 2008). Although traditionally punitive, recent studies show a stronger tendency toward restoration and victim compensation (Liu et al., 2021; Riedl et al., 2015; Yang et al., 2021). This study examines Colombian children's (7–11 years) restorative or retributive preferences as third-party observers of distributive transgressions, and the role of group affiliation and parental practices (corporal punishment)

Justice Needs Theory

To explain the preference for one or another justice orientation, Wenzel et al. (2008) propose that perceived injustice creates a need to reprehend the victimizer to reduce the moral and symbolic impact of the transgression. The authors expose two courses of action that can solve that need: retributive or restorative. These approaches generally rebuke transgression, although they differ on their specific objectives and the behavioral frames they employ (Wenzel & Thielmann, 2006).

Retributive Justice

In retributive justice, reprimand comes from the unilateral imposition of punishment proportional to the transgression, which may involve suffering, humiliation, exclusion, or even death (Okimoto et al., 2012; Wenzel et al., 2008; Wenzel & Okimoto, 2016). This model, central to Western systems as a deterrent against norm violations (Duff, 2001), has dominated psychological research on justice decision-making (Okimoto et al., 2012). Predictive factors include personal values of power and self-improvement (Feather, 1996; Wenzel et al., 2008), power-seeking and social dominance (Gerber & Jackson, 2013; Okimoto et al., 2012), and authoritarian aggression within right-wing authoritarianism (McKee & Feather, 2008; Wenzel & Okimoto, 2016). Other influences are moral indignation, anger (Bastian et al., 2013), and internal crime attributions (Templeton & Hartnagel, 2012).

Individuals with these traits tend to favor punishment to deter selfishness, reinforce norms (Fehr & Gächter, 2002; Henrich et al., 2006; Hofmann et al., 2018; Krasnow et al., 2016; Nelissen & Zeelenberg, 2009; Yamagishi et al., 2017), and regulate deviant behavior (Balliet et al., 2011; Jordan et al., 2016). Such tendencies emerge early: preverbal children prefer those who act against transgressors (Kanakogi et al., 2017), and six-year-olds make personal sacrifices to enforce norms (McAuliffe et al., 2015; McAuliffe & Dunham, 2021). As Marshall & McAuliffe

(2022) note, children's interventions reveal that retributive justice satisfies justice needs. Yet this model is reactive, neglects prevention, and overlooks victims' broader social needs (Okimoto et al., 2012).

Restorative Justice

The restorative model emphasizes injustice prevention through the renewal of social agreements on norms and values (Wenzel et al., 2008), involving the victimizer in restoring the moral-symbolic state. Restoration preserves identity and cooperation within the community (Wenzel & Thielmann, 2006; Wenzel et al., 2008; Wenzel & Okimoto, 2016) and requires recognition of harm, regret, and responsibility (Wenzel et al., 2008). Contrary to punitive tendencies, studies show preference for compensating victims over punishing offenders (FeldmanHall et al., 2014; Jordan et al., 2016; Heffner & FeldmanHall, 2019). In intergroup contexts, restoration signals moral superiority and trustworthiness, favoring cooperation (Jordan et al., 2016; Patil, 2018). Thus, restoration is often preferred, enhancing reputation and promoting victim well-being while deterring future transgressions (McCullough, 2008; Wenzel et al., 2008).

Few studies have examined school-aged children's justice preferences comparing punishment and restoration (Lee & Warneken, 2020; Liu et al., 2021; Riedl et al., 2015; Yang et al., 2021). Liu et al. (2021) found that 4–6-year-olds rated restorative choices as most desirable and behaved accordingly, suggesting consistent early preferences. However, the scarcity of such research and the absence of studies in Latin American populations leave unclear whether these findings generalize beyond WEIRD contexts (Yang et al., 2021).

Social Identity and Group Bias in Justice Needs

Justice preferences vary with the transgressor's group affiliation, showing greater tolerance or harsher punishment depending on whether the

offender is ingroup or outgroup (McAuliffe & Dunham, 2016). Social identity theory (Tajfel, 1978) explains this as part of self-concept derived from group membership, where shared values and pride make justice choices vulnerable to bias (Sindic & Condor, 2014). In this study, group bias is defined as emotional and cognitive processes that enhance ingroup desirability through favoritism and/or hostility toward outgroups (Brewer, 1999; Dovidio & Gaertner, 2010; Messick & Mackie, 1989; Sindic & Condor, 2014).

One such disposition is parochialism, where preserving status fosters positive evaluations of ingroup members and intergroup favoritism, sometimes coupled with outgroup hostility (Pisor & Ross, 2023). Degrees of parochialism include universal cooperation benefiting all groups (Buchan et al., 2009), weak parochial cooperation benefiting only the ingroup without hostility (Aaldering et al., 2018), and strong parochial cooperation combining ingroup benefit with outgroup hostility (Aaldering & Böhm, 2020; Böhm et al., 2016). In contrast, the "black sheep effect" (BSE) describes harsher evaluation of deviant ingroup members to preserve homogeneity, arising only in comparison contexts (Marques & Paez, 1994). This results in stricter expectations and punishments for ingroup offenders (Abrams et al., 2014; Fehr & Fischbacher, 2004; Marques & Paez, 1994; Mendoza et al., 2014; McAuliffe & Dunham, 2016; Schmidt et al., 2012; Wu & Gao, 2018).

These biases affect aggression, competition, punishment, and xenophobia (Bowles & Gintis, 2004; Hruschka & Henrich, 2013; Pisor & Ross, 2023; Yamagishi & Mifune, 2016). Studies using distributive transgression games show that people favor the ingroup and punish their members less severely (Aaldering & Böhm, 2020; Schmidt et al., 2012; Schiller et al., 2014; Yang et al., 2021; Yudkin et al., 2020). This tendency emerges early, as children aged 3–8 distribute more resources and give higher evaluations to ingroup members (Dunham et al., 2011; Jordan et al., 2014; Ünal-Koçaslan & Akgün, 2023; Yang et al., 2021). Given the centrality of corporal punishment, this

study also examines its relationship with justice preferences and authoritarianism

Corporal Punishment and Authoritarianism: Corporal Punishment

With the aim of understanding the role parental practices have on the development of justice preferences, the study covered the relationship between frequency/severity of corporal punishment (as reported by the participant's caretaker) and the child's authoritarianism traits. Corporal punishment is understood as any behavioral correction strategy that employs physical force, causing physical pain or discomfort, without meaning to cause injury (United Nations Committee on the Rights of the Child [CRC], 2007; Straus, 2010). This parental practice has been shown to have numerous and significant negative effects on the social and psychological development of children in varied sociocultural contexts given its impact on their cognitive (Gershoff & Grogan-Kaylor, 2016), emotional (Afifi et al., 2012), and social-behavioral (Guevara et al., 2021; Temple et al., 2018) development. Despite the scientific evidence and the governmental efforts to forbid it, it remains a frequent practice around the world (Cuartas et al., 2019; duRivage et al., 2015).

Corporal Punishment and Authoritarianism: Authoritarianism

Corporal punishment may shape authoritarian beliefs, which predict retributive justice orientations (Wenzel et al., 2008). Authoritarianism consists of aggression, submission, and conventionalism (Altemeyer, 1988), and has traditionally been linked to authoritarian parenting and corporal punishment (Fuchs, 2003; Horkheimer et al., 1936). In recent years, it has become central to research on political and judicial decision-making, influencing participation in restorative processes and the intensification of punitive responses (Bakhshay, 2020; Okimoto et al.,

2012). Gerber (2012) highlighted its predictive role in punitive attitudes aimed at preserving collective safety, and Gerber (2021) confirmed that RWA, especially authoritarian aggression, correlates with retributive tendencies. These findings stress the need to understand how this value system develops and influences justice orientation.

Only three studies have compared authoritarian attitudes between participants exposed to corporal punishment in childhood and those who were not (Decker et al., 2012; Clemens et al., 2020; Kemme et al., 2014; Osborne et al., 2023). Results show a significant relationship between corporal punishment and authoritarianism, along with higher punitive behavior in adulthood. Together, these findings suggest a potential pathway linking corporal punishment to retributive justice through the development of authoritarian values. The present study explores this relationship for the first time.

Research question

Despite these results, there still isn't a clear tendency towards justice orientations in participants aged 7-11, given the inconsistent, scarce, or contradictory results. Therefore, the need to perform more studies that elucidate the development of justice preferences prevails, especially ones that explore different variables involved in the formation of these preferences, such as nurture practices, group biases, and age. The present study examines 7-to-12-year-olds' preferences between restorative and retributive measures directed at a victimizer who either shares or does not share their group affiliation. The research question was: How do group biases and corporal punishment influence the justice-type preferences of primary school children observing a scenario of distributive unfairness?

Hypothesis

Our first hypothesis is that there will be differences in the reported justice preference,

favoring restoration over retribution, that is, the choice of mostly milder punishment options and fuller restoration solutions (Heffner & FeldmanHall, 2019; Jordan et al., 2016; Liu et al., 2021; Riedl et al., 2015; Yang et al., 2021).

Regarding how minimal group affiliation influences children's justice preferences when it comes to distributive transgressions, our second hypothesis is that the transgressor's group affiliation will have an effect over justice preferences, leading to higher restoration scores for victimizers who share group membership with the participant (Aaldering & Böhm, 2020; Jordan et al., 2014; Pisor & Ross, 2023; Yang et al., 2021; Yudkin et al., 2020).

Lastly, our third hypothesis is that there will be a positive relationship between severity/frequency of corporal punishment and children's RWA levels, as reported by Clemens et al. (2020). We also expect this to be the case between child RWA and retributive justice preferences (Gerber, 2021; Okimoto et al., 2012).

Method

Participants

The sample of the present study consisted of 64 Colombian primary school students from third to fifth grade (29 girls, $M = 9$ years old, $SD = 1.70$, range = 6-11 years old; 35 boys, $M = 10$ years, $SD = 2.00$, range = 7-12 years old) from a public school in Bogotá, with their corresponding caretakers (50 women [80%] and 14 men [20%]). This sample was selected based on previous findings in the field (Jordan et al., 2014; McAuliffe & Dunham, 2016) and the recommendation of different authors about the importance of covering this age group given its emergent cognitive characteristics and how they influence their decision-making process (Yang et al., 2021). The post-hoc analysis of the present sample and the results with G*Power 3.1 (one tail, $\alpha = 0.05$, difference between two dependent measures, effect size calculated from the justice orientation measures) show that 80% of the desired statistical power was achieved. In the

experiment reported in this study, the caretaker's consent was given through the educational institution by filling out a form through the Google Forms platform.

Design

The experiment had a mixed measurement design of 2 (transgressor's group affiliation) $\times$ 3 (trials). The experimental condition, as well as the inclusion of different stimuli (balls, pencils, or coins) led to the creation of six different distribution stories. The dependent variables were the scores on restorative and retributive semantic differentials (after showing each story), the justice preference understood as the addition of the difference between those values (e.g., mostly restorative or retributive) and the score on the child authoritarianism scale.

Instruments

Story with Vignettes

The story used throughout the experiment was presented through vignettes, composed of an image created with Artificial Intelligence (AI), audio narration, and text of the script of the audio (see Appendix A).

The images used to present the story were generated by the authors using the AI platform Midjourney in a two-stage process carried out in 2023. The first stage aimed to generate a reference image of an adult playing and distributing teaching materials to two children. This was accomplished using prompts and supplying the AI with a reference image of what the end goal was supposed to look like. The final product was achieved after many creations with the following prompt: "A woman playing with two puppets and little yellow Stuffed dolls, in the style of video feedback loops, CAD (computer aided design), Ruth Sanderson, science-based, 1st version, group material, dynamic angles -v 5 -s 250 -" (see Figure 1).



Figure 1.
Final product of the first phase of image creation with AI.
Source: own work.

The second phase had the goal of adding specific materials (balls, pencils, and coins) with homogeneous agents, to reduce social desirability or other biases that could have been created by the use of a single stimulus. This was achieved through a combination of techniques and steps: The image obtained in the final phase was edited using the tool Microsoft Paint to get rid of the AI-generated elderly woman, who was replaced by an amplified version of the puppets; this version of the image was then uploaded to the AI platform and used as the starting point to generate new images using the following prompt: “A big puppet playing with two little puppets, using yellow balls, experimental video, in the style of video feedback loops, CAD (computer aided design), Muppet, science-based, dynamic angles --v 5 --s 250” (see Figure 2).

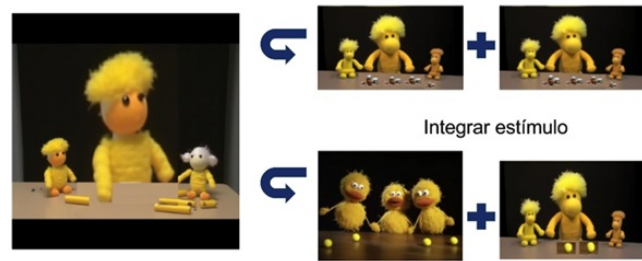


Figure 2.
Process and final product of the second phase of image creation with AI.

Source: own work.

Finally, using Midjourney’s “variations” function, different placements for the materials in the images were achieved. The process allowed us to obtain an image bank with different distributions (fair and unfair), as well as characters with different characteristics (see Appendix B).

Dependent Variables

Semantic Differential

Justice preferences were measured through two semantic differentials. One presented possible retributive options ($\alpha = 0.58$), the left extreme being less severe than the right one (e.g., “be punished for a whole evening” or “be punished for a whole week”), and the other inquired over possible restorative solutions ($\alpha = 0.63$), (e.g., “know that what he did hurt Carlos” or “understand that what he did hurt Carlos and how he could have avoided it”). The extremes of the spectrum were designed based on the items of the justice orientation questionnaire designed by Okimoto et al. (2012), which allowed the integration of different components of every justice type (e.g., humiliation, denying due process/reflection to the victimizer, forgiveness, etc.). The participant had to slide a cursor to the point they considered appropriate, registering a measure between 1 and 100. The preference was inferred from the spectrum with the highest

weighted score throughout the stories (see Appendix C).

Child Authoritarianism Scale

A 3-point Likert scale was designed, consisting of eleven items (9 positive and 2 negative) measuring the components of authoritarian submission and aggression originally included in the Spanish version of the RWA scale (Seoane & Garzón, 1992). The adaptation done by Imhoff & Brussino (2017) for children in Córdoba, Argentina, was taken as a reference, replacing some terminology to better fit the sociocultural Colombian context. The scores offer a general measurement (*min* 11; *max* 22) ($\alpha = 0.43$) (see Appendix D).

Caretaker Questionnaires

The caretakers signed the informed consent form before their children took part in the study and completed (via Google Forms) the survey of parental practices and corporal punishment made by Straus, (2010) and adapted to Colombian population by González et al. (2014), which measures frequency (0-5) and severity (1-14) of corporal punishment ($\alpha = 0.83$).

Procedure

A researcher conducted the experiment with groups of ten participants in a well-lit and silent computer science classroom. It consisted of five phases: introduction, observation of the vignette story, comprehension check, justice preferences selection, and authoritarianism measurement. Justice preference was ascertained first to avoid changes in the justice choices based on the answers given to the authoritarianism scale (Bandura et al., 1996). It took every participant approximately 20 minutes to fill in the questionnaire. The procedure of each phase was as follows:

Introduction

Participants were instructed about the procedure around three stories they were going to see on a laptop. In the stories, two children (personified as two puppets) sit side by side in front of a table with three different materials (one ball, pencil, or coin per story). The participants were told that they would see the materials being distributed and they should then choose a course of action according to the situation they saw. They had to write their names to continue to the next phase.

Observation of the Vignette Story

Participants were randomly assigned to one of two possible experimental groups depending on the experimental condition (transgressor's group affiliation), as shown in Figure 3. They were then shown three stories in vignette form accompanied by the audio of a narrator's voice. Said stories showed a distribution scenario matching the corresponding assigned group: 1) Unfair ending with ingroup transgressor, or 2) Unfair ending with outgroup transgressor.

Group Affiliation Conditions

For the outgroup experimental condition there was a third puppet that distributed the materials, which included adult physical characteristics (taller and larger) compared to the other two. In the ingroup condition, one of the starting puppets (classmate) was the one who distributed the materials. These distributions were shown progressively in each vignette and were accompanied by text and audio describing the events.

Comprehension Check

At the end of the story the participants had to answer the question: "Do you think what happened was unfair?" with "yes" or "no" as answer options. The participants who voted "yes" moved on to the semantic differentials, while

those who voted “no” moved on to the next story. This procedure was repeated for every one of the three stories.

Justice Preference Selection

The retributive semantic differential was shown first, followed by the restorative one. This happened after every story. This procedure follows the recommendations of different authors about designing methodologies that measure justice preferences by offering the participants options that include more complex conceptualizations of justice (Liu et al., 2021; Okimoto et al., 2012; Yang et al., 2021; Wenzel et al., 2008).

Authoritarianism Measurement

The participants answered a child authoritarianism questionnaire (adapted from Imhoff & Brussino, 2017), after which the experiment ended with a message thanking them for their participation. To show the vignettes and questionnaires the platform PsyToolkit (Stoet, 2010; Stoet, 2017) was used. Data collection was done through an Excel spreadsheet and statistical analysis were conducted with the software JASP version 0.19.0.

Data Analysis

Preliminary analysis with linear models (gender, age, and assigned group as independent variables and covariables respectively), showed no significant results (all p values = 0.306). The justice preference analysis was done based on the difference between the weighted scores of the semantic differentials. The analysis of the effect of group affiliation on justice preference was done through ANCOVAS. For relationship analysis between variables—frequency, severity of corporal punishment, authoritarianism and retributive actions—a Spearman correlation coefficient was carried out.

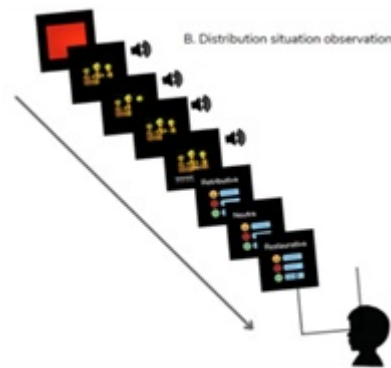


Figure 3.
Visualization of participant group assignment and procedure.
Source: own work.

Source: own work.

Results

Confirmatory Measures

Justice Preferences: Retribution vs. Restoration

There was a higher preference for restoration. 65 % ($N = 42$) of the sample selected higher levels of restoration compared to the 24% ($N = 15$) who showed a preference for retribution. Lastly, the remaining 11% ($N = 7$) had an equal inclination towards both types of justice (Figure 4).

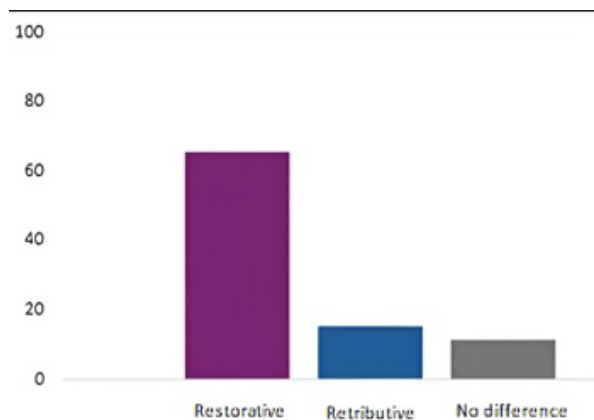


Figure 4.
Percentage of participants based on justice preference.
Source: own work.

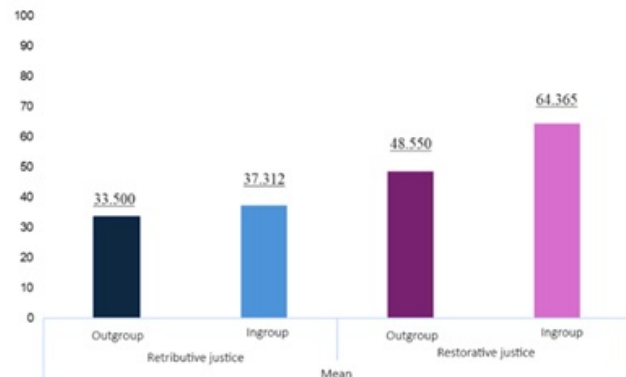


Figure 5.
Average scores in justice semantic differentials according to transgressor's group affiliation.
Source: own work.

Effect of Group Bias over Justice Preference

There was a significant difference between the selection of restorative justice: participants in the ingroup condition chose higher/more complete restoration solutions towards the ingroup transgressor ($M = 64.36$, $DT = 24.54$, $N = 31$) when compared to the outgroup transgressor condition ($M = 48.55$, $DT = 29.81$, $N = 33$), with effect size being $F(1, 10) = 5.32$, $p = 0.024$, $\eta^2 = 0.079$. On the other hand, we didn't find a significant difference between the retributive justice measures: Participants chose similar punishment levels both for ingroup ($M = 37.312$, $DT = 23.211$, $N = 31$) and outgroup transgressors ($M = 33.5$, $DT = 25.712$, $N = 33$), with a null effect size $F(1, 10) = 0.386$, $p = 0.537$, $\eta^2 = 0.006$ (see Figures 5 & 6).

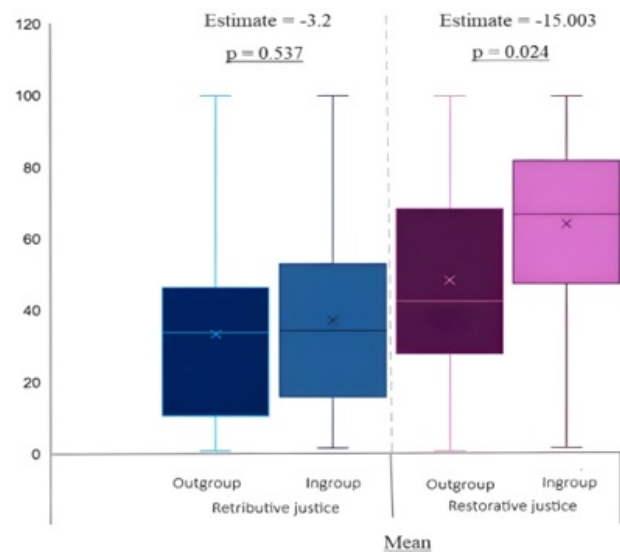


Figure 6.
Effect of transgressor's group affiliation over the selection scores in different retributive and restorative semantic differential. Shows the effect of transgressor's group affiliation, as well as effect size and significance.
Source: own work.

Exploratory Measures

Relationship Between Punishment and Child Authoritarianism

A Pearson correlation analysis was performed to measure the relationship between these variables. The analysis didn't show a significant correlation between corporal punishment severity and child authoritarianism levels: $r(98) = -0.017$, $p = 0.892$. Likewise, corporal punishment frequency didn't have a significant relationship with child authoritarianism, $r(98) = -0.047$, $p = 0.715$. Generally, authoritarianism ($Avg = 15.078$, $SD = 3.511$, $N = 64$) behaved independently to both corporal punishment severity ($Avg = 4.05$, $SD = 3.06$, $N = 64$) and frequency ($Avg = 4.48$, $SD = 5.18$, $N = 64$) (see Table 1).

Relationship Between Child Authoritarianism and Retributive Justice

The results show no significant correlation between child authoritarianism scores and selection scores for the retributive semantic differential $r(98) = 0.018$, $p = 0.152$. Generally, the selection scores for this semantic differential ($Avg = 35.347$, $SD = 24.41$, $N = 64$) behaved independently from the child authoritarianism scores (see Table 1).

Table 1
Spearman correlations between variables

Variable	1	2	3	4
1.Resto. pref	-	-	-	-
2.Retri. pref	0.374**	-	-	-
3.CP severity	0.140	0.124	-	-
4.CP frequency	0.197	0.106	0.626***	-
5.Autoritarianism	0.056	0.181	-0.017	-0.047

Note. Significant P values are underlined:
*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

The Pearson analysis correlation showed another relevant correlation for the present

study, where there was a positive significant correlation between the scores of both semantic differentials: retributive ($Avg = 35.347$, $SD = 24.41$, $N = 64$) and restorative ($Avg = 56.211$, $SD = 28.31$, $N = 64$), $R(98) = 0.37$, $p = 0.002$ (Table 1).

Discussion

We found a marked preference between retribution and restoration, the effect the transgressor's group affiliation has over this preference, and results about the role of corporal punishment. Children aged 7 to 12 favor restoration over retribution, preferring to involve the transgressor in dialogical spaces to reinforce social agreement around norms. Our findings expand on previous work (Yang et al., 2021) by comparing the preference between these justice models through a distributive strategy, finding that participants preferred to give back stolen resources from a victim without taking the ones that already belonged to the victimizer. We found this same preference with punitive retributive and dialogical restorative options (e.g., punishment for a week vs. explaining how to do better). This suggests that the meaning children give to the reprimand of a transgression is mostly influenced by a desire to preserve future cooperation, rather than emphasizing a negative consequence through punishment.

Regarding the effect of ingroup affiliation, we found an increase in restorative actions. The results expand on evidence of group bias, by testing if group affiliation affects the preference between taking resources from a victimizer (punishment) or getting back the stolen objects without taking anything else (restoration), as victim (second party) or observer (third party) (Yang et al., 2021): only in the second party conditions the ingroup was favored with more restoration. We included dialogical restoration options and found that the observers favor the ingroup with more restoration. This result can be explained by the different benefits offered by the applied solution, one with a materialist focus doesn't offer benefits to an observer more

than recovering equality between groups, by the other hand a normative one adds the benefit of strengthening ingroup cohesion by reaching agreements with the victimizer. In other words, the benefits the observer gets by restoring through dialogue are bigger if they are used with ingroup transgressors in contrast to outgroup transgressors.

These findings complement prior work on the requirements for ingroup exclusion in the black sheep effect (BSE) (Marques & Paez, 1994). Exclusion of deviant ingroup members typically requires intergroup comparison. Our results support this, showing no exclusion of ingroup transgressors in the absence of such comparison; instead, the priority was restoring agreement over norms. By contrast, studies involving group comparison have reported BSE (Mendoza et al., 2014).

Other research has found ingroup exclusion without explicit comparison (Abrams et al., 2014; Wu & Gao, 2018), though these studies assessed evaluations rather than behavior. Since negative attitudes do not always translate into actions—the attitude–behavior gap (Bernardes et al., 2018; Bechler et al., 2021)—it remains essential to measure the behavioral dimension of BSE rather than infer it only from assessments (Marques & Paez, 1994; Abrams et al., 2014).

For outgroup transgressors, restoration was prioritized over retribution. This aligns with research on intergroup cooperation: Aaldering & Böhm (2020) argue that prioritizing hierarchies fosters parochial altruism, while prioritizing equity promotes universal cooperation. Our findings support this, showing restorative actions toward outgroups in the absence of intergroup comparison, suggesting such comparison may be necessary to trigger parochialism. Future studies should examine the mediating role of intergroup comparison in group biases.

The study also explored corporal punishment as a precursor of authoritarianism (Horkheimer et al., 1936), but no significant relationships with retributive actions were found. This agrees with prior work showing that consistency among authoritarian components—submission and aggression—emerges mainly in adolescence

or later (Duckitt, 2001; Imhoff & Brussino, 2017; Ruffman et al., 2016)

This supports Altemeyer's (1988) view of authoritarianism as a value system formed during adolescence through political socialization, creating alignment between values and behavior. Imhoff & Brussino (2017) argue that weak associations between authoritarianism and other variables in student samples stem from the absence of this process. Thus, our results may reflect a lack of perceived consistency between unilateral punishment and participants' value systems (Altemeyer, 1988; Duckitt, 2001). Further studies examining this age group's value systems are needed to test this hypothesis. Another explanation involves parenting styles. Gunnoe (2013) notes that even democratic parenting can use corporal punishment, making it too widespread to uniquely predict authoritarian values. While our study advances understanding of parental practices and justice preferences, other mechanisms such as emotional regulation also matter (Zheng et al., 2017). Future research should apply a dual influence model (cognition + emotion) to clarify the role of corporal punishment in retributive decision-making.

The procedure that was used allowed us to analyze the way in which decision-making in this kind of scenario is oriented by a particular justice model (Wenzel & Thielmann, 2006). Our methodology allows participants to choose between weaker and stronger options between these justice orientations. As was previously explained, the stronger options included a bigger quantity of restorative or punitive components (Okimoto et al., 2012). For example, the restorative options seek the resocialization of the victimizer and tend to the identitarian impact of the transgression (Wenzel & Thielmann, 2006; Wenzel et al., 2008; Wenzel & Okimoto, 2016). An additional advantage of this methodology is that it discards the possibility that the preference for a type of justice is compensation for the other's severity, by allowing the participant to freely choose the severity of the action.

Limitations

This study has several limitations. First, participants made choices based on hypothetical stories, a common method with children that aids conceptual application (Gómez-Espino, 2012), but they did not interact with real classmates or face actual transgressions. It remains unclear how punishment or restoration would vary in real contexts, especially if participants were identifiable.

Second, responses were restricted to the provided justice spectrum, a common experimental approach but one that may limit variability. Although stimuli differed in type—necessary (coins, pens) versus unnecessary (balls)—their order was fixed, leaving potential saliency effects unexamined. Finally, the scenario involved a relatively minor transgression compared to others such as theft, aggression, or lying, which may have led to leniency. Future studies should address severity, transgression type, and stimulus necessity, as resource distribution is a frequent source of conflict in schools (McAuliffe & Dunham, 2021)

Conclusion

Our study contributes to the body of empirical evidence that supports the restorative justice model as the preferred solution to transgression and challenges the traditional view of retribution as the main answer to injustice. From the frame of justice preferences (Wenzel & Thielmann, 2006), the study shows the importance of facilitating dialogue in conflict resolution and facilitated the measurement of variables involved in the early developmental apparition of social phenomena such as exclusion and cooperation. We expand on findings from previous research done with non-WEIRD populations (Western, Educated, Individualistic, Rich, and Democratic) by having Colombian participants (Aaldering & Böhm, 2020; Yudkin et al., 2020; Yang et al., 2021; Ünal-Koçaslan & Akgün, 2023). Our results have relevant implications for educational

intervention and prevention regarding conflict resolution.

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Appendixes



Appendix A.
Example of a Vignette.



Appendix B.
Image Bank (Fair and Unfair Distributions).

I want Juan to be

Punished this afternoon

69

Punished the whole week

Rt

I want Juan to be

Scolded after class

?

Scolded in front of the whole class

I want that

Juan understand that what he did was wrong and should

85

Juan and my classmates understand that what he did was

Rst

Appendix C.
Justice Preferences Semantic Differentials.

Yo creo que...

Item	En desacuerdo	Ni en desacuerdo ni de acuerdo	De acuerdo
Las leyes deberían castigar más a los criminales y marchantes.	☐	☐	☐
Los policías son más peligrosos que los marchantes.	☐	☐	☐
Como están las cosas en este país, se debería castigar muy duro a los criminales y marchantes.	☐	☐	☐
Es importante proteger los derechos de los marchantes, y también de los criminales.	☐	☐	☐
Siempre es mejor confiar en lo que digan las maestras, directoras, policías y padres que en lo que dicen los marchantes.	☐	☐	☐
La maestra, la directora, los padres y los policías suelen tener razón, y los marchantes no saben de lo que están hablando.	☐	☐	☐
Hay que castigar más duro a los que provocan problemas en la escuela, la sociedad o el país para que haya orden.	☐	☐	☐
Lo más importante que tenemos que aprender los niños y niñas es a obedecer y respetar a las personas con autoridad, como las directoras, maestras o policías.	☐	☐	☐
Lo mejor para vivir bien es ser obediente y disciplinado.	☐	☐	☐
Los peores ciudadanos de nuestro país son los que no respetan nuestra bandera, nuestros símbolos y la forma correcta de hacer las cosas.	☐	☐	☐
Si alguien en mi curso empieza a ser maleducado e irrespetuoso con la maestra, directora o policías, los padres deben corregirlo.	☐	☐	☐

Appendix D.
Child Authoritarianism Scale

Notes

* Research article

Ethics Approval Statement The present study was conducted based on the Helsinki declaration.

The treatment of human participants was carried out in accordance with the standards of the American Psychological Association. The rights of participants were protected by following the aforementioned parameters, as well as those established in the code of ethics for the research of psychologists in the Republic of Colombia, law 1090 of 2006, guaranteeing the principles of beneficence, non-maleficence, autonomy, justice, and integrity. In particular, the non-revictimization of the participants (minors) was ensured, firstly, through the design of the instruments (vignettes) since their use did not imply exposure to real transgressions, and, secondly, through the approaching protocol for use of physical punishment, which only involved parents in the collection of this variable.

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