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Just environments foster character: A longitudinal assessment of school climate

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ABSTRACT

Justice is at the center of many definitions of character across various lines of research, yet there is little empirical research on how the justice of contexts can foster character virtues. The current study draws from a sample of 1,865 Brazilian fourth and fifth graders across two time points in 60 schools (42.7% White; 48.3% male). A multilevel structural equation model demonstrated the mediating role that justice beliefs play between authoritative school climate and socio-emotional learning, and the character virtues of bravery, fairness, and prosocial leadership even after accounting for grade, gender, ethnicity, and socioeconomic status (SES). This study highlights the importance of understanding the contextual justice of children's environments on the development of character virtues.

KEYWORDS

Justice beliefs; socioemotional learning; school climate; fairness

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Introduction

The fundamental features of character development involve human welfare, justice and rights (Berkowitz, 2012; Nucci, 2018). These features are inherent in interpersonal relations and are regularly manifested in school contexts as children develop their value system and moral agency. When youth are embedded in healthy nurturing contexts, such as those high in structure and support, they are empowered to develop strong character. The purpose of this paper is to investigate how a supportive and structured climate that focuses on socio-emotional development might influence the perceptions of justice which can help them internalize character virtues of communal living.

Brazil has high levels of economic inequality (Instituto Brasileiro de Geografia e Estatística [IBGE], 2017), which can present real threats to children's sense of safety and well-being, particularly if they are growing up with social or economic disadvantages that put them at higher risk of suffering injustices. Prior research has shown Brazilian children in public schools, who tend to come from lower socioeconomic backgrounds, are more likely to have lower perceptions of justice in their personal lives (Thomas & Rodrigues, 2020). Low perception of justice in one's personal life is correlated with a host of negative personal outcomes (for review, see Bartholomaeus & Strelan, 2019). This paper seeks to understand to what extent a nurturing school environment can create a microcosm of justice that can foster the positive virtues of bravery, fairness, and prosocial leadership. These have inherent communal value because they require people to stand up for one another, be agents of justice, and see the well-being of the group. These character virtues require initiative and purpose and may emerge from positive contexts that build the expectation of justice (personal belief in a just world) necessary for such moral agency. This paper is not about creating a cognitive illusion of justice, but about nurturing a positive school context that can increase justice in children's lives and foster the behaviors necessary for social change.

Character development: its complexity and specificity

Prominent character development researchers have long stated that goodness is not the absence of problems (R. M. Lerner, 2018). Thus, the study of human flourishing and optimal youth development is closely tied to the understanding of character (Narvaez, 2008; Park &

Peterson, 2006). Studies on character strengths have associated them with well-being (Shoshani & Slone, 2013; Weber & Ruch, 2012), life-satisfaction (Blanca et al., 2018) and positive affect (Weber et al., 2016). The importance of character is well- established, but its origin and development are less understood. Researchers must strive to understand what combination of contextual and individual variables fosters virtues to uplift the community at large.

The rich literature of character development has established complex models that conceptualize character as an all-encompassing system that is contextually specific and relationally driven (Nucci, 2018). Character is the ‘complex constellation of psychological characteristics that motivate and enable individuals to function as competent moral agents’ (Berkowitz, 2012). Yet, despite its intricacy and elaborateness, leading researchers in the field acknowledge that the empirical studies must investigate specific individual↔- context relations to further its understanding (R. M. Lerner & Callina, 2014). Character is not fixed or immutable; it is plastic and ever-changing. Thus, research should mind the specificity principle and examine specific virtues in specific contexts, at specific times (R. M. Lerner, 2018).

Among the recurring themes in the field of character development and education are the importance of caring relationships (Berkowitz et al., 2017; R. M. Lerner, 2018; Narvaez, 2008), the impact of context (R. M. Lerner, 2018; Nucci, 2018), and the centrality of human welfare and justice (Berkowitz, 2012; Narvaez, 2008; Nucci, 2018). For this reason, the current study will examine how the school context may shape students’ perceptions of justice, which may in turn influence their character self- evaluations. This approach is in line with Vygotsky’s sociocultural theory (Vygotsky, 1978). According to Vygotsky, children actively construct their view of the world, but the context signals to them the values they should internalize. Similarly, the current study puts forth a model that includes children’s constructed views of the world as the mediator between context and moral action. The following literature review will provide an overview of school climate, socio-emotional learning (SEL), and personal expectations of justice (personal belief in a just world; P-BJW). This study will investigate how P-BJW may play a mediating role between context and specific character outcomes related to justice.

School climate and Socio-Emotional Learning (SEL)

School climate is an umbrella term that encompasses many dimensions such as

class- room discipline, school rules, safety, and relationships with teachers and peers. Research in this area has generated much empirical evidence and effective educational interventions. One of the approaches to the study of school climate has drawn from Baumrind's parenting typology (Baumrind, 1971), focusing on how schools provide well-structured and supportive environments (G. Bear et al., 2014) in what has been called an authoritative school climate (Cornell & Huang, 2016). An authoritative school climate has been linked to less victimization (Amaral et al., 2019; Fisher et al., 2017) and fewer problematic behaviors even after controlling for demographic variables (Cornell & Huang, 2016; Reaves et al., 2018). Not only is it related to fewer negative behaviors, there is also longitudinal evidence that school climate can be associated with fostering positive student outcomes such as increased social responsibility (Cunha et al., 2021) and higher levels of prosocial behaviors (Luengo Kanacri et al., 2017).

A positive school climate is also associated with a stronger sense of safety (Gregory et al., 2010), which is a concept that has been a recent focus of character development research, suggesting that safety could be a moderator between a character intervention and positive youth development (Tirrell et al., 2020). In other words, youth contributions and positive outcomes are higher when their environments are safer. A sense of safety is a key component of both school climate and personal expectations of justice. As will be further explained in the next section, when youth perceive their lives to be fair, they are less threatened by the possibility of random injustices and feel increased control and agency.

In addition to a positive school climate, an abundance of research in recent years has focused on the importance of socio-emotional learning (SEL) for a plethora of positive childhood outcomes (Durlak et al., 2011). SEL does not focus on rewarding good behavior or punishing bad behavior, but instead teaches students how to handle their emotions, take others' perspectives, and build social skills (G. Bear et al., 2014; Elias & Schwab, 2006). For example, instead of telling students what they cannot do when they are frustrated, teachers focus on instructing students how to manage their frustration. Or, instead of teaching children how to identify a bully, schools show them how to solve conflict and take others' perspectives. Usage of SEL strategies are related to fewer discipline referrals (Freeman et al., 2016) and decreased aggression and victimization (Cunha et al., 2021). A meta-analysis revealed SEL interventions are associated with fewer conduct problems such as bullying, delinquency, suspensions, and disruptive classroom behaviors (Durlak et

al., 2011). Similarly, higher teacher emotional support is related to lower levels of emotional and behavioral problems in students (Yeung & Leadbeater, 2010). Teaching socio-emotional strategies presumably does not only diminish negative outcomes, but has also been associated with documented prosocial behaviors (Cunha et al., 2021; Durlak et al., 2011).

The connection between SEL and positive character outcomes is under debate, with some leading researchers pointing out terminology issues in the field of SEL and character education (Berkowitz, 2021). But the overlap between these should not be surprising since emotion and reason calibration is important for character development (Lapsley, 2019). The Jubilee Center (2017) puts self-regulation (one of the primary goals of SEL) as a core feature of its model for moral development. People cannot simply desire to act morally, they have to develop the ability to manage anger, take others' perspectives, and handle conflict in order to foster the moral agency for such actions. School climate and SEL likely play a central role in character development because they encompass relationships within the school, and there is an abundance of research on the importance of strong relationships for character development (Berkowitz et al., 2017; Hershberg et al., 2016; R. M. Lerner, 2018). This paper does not suggest that SEL and character education are the same. Instead, it showcases how SEL and school climate can contribute to character development, partially because of how they can construct a more just environment for children.

Character development emphasizes the importance of personal agency and that character is an adaptive outcome of the bidirectional relationship between person and context (R. M. Lerner & Callina, 2014). Research on specific character strengths in school contexts has shown associations between character measurements and student engagement (Madden et al., 2020), peer relationships (Wagner, 2019), achievement (Weber & Ruch, 2012; Weber et al., 2016), and positive behavior (Wagner & Ruch, 2014). However, little research has focused on youth character strengths in Latin America or in younger student samples (Ray et al., in press). Additionally, the work on character strengths in the school has predominantly viewed it as a personal trait, and under-investigated the contextual and individual factors that may foster such outcomes. This paper investigates how a supportive and structured climate that focuses on socio-emotional development might signal to children that they can expect their justice efforts to yield results and help them internalize values of communal living.

Personal expectations of justice: agency and safety

Someone's Personal Belief in a Just World (P-BJW) is the extent to which they perceive their lives to be just. This is differentiated from someone's general belief in a just world, which is a belief that the world is mostly a fair place where people get what they deserve and deserve what they get (M. J. Lerner, 1980). The latter is frequently associated with blame-the-victim mentality or used to justify inequalities (M. J. Lerner, 1980). In contrast, P-BJW is specific to people's expectations and evaluations of their personal life, a differentiation made in the 1990s in just world research (Lipkus et al., 1996). P-BJW is considered an adaptive and healthy belief pattern that helps people preserve a sense of safety and internal locus of control (Dalbert, 2009). Perceiving one's own life as typically fair has been connected with subjective well-being (Correia et al., 2009), hope for the future (Dalbert, 1999; Liu & Platow, 2020) and is negatively associated with mental health concerns (Hoolihan & Thomas, 2020; Weinberg et al., 2020). A recent literature review highlighted the multiple adaptive outcomes of a higher P-BJW (Bartholomaeus & Strelan, 2019). This paper utilizes P-BJW as a measure of personal expectations of justice.

Much research on P-BJW has seen it as an individual trait, instead of as a learned perspective. In contrast, a recent large cross-sectional study in Brazilian schools used P-BJW as an outcome variable and calculated that school climate and classroom management strategies accounted for between 12% and 20% of the variance of P-BJW, depending on the age group (Thomas et al., 2019). In that study, SEL was one of the strongest predictors of P-BJW. This likely happens because the positive relationships with authorities help children to control their emotions and attitudes and search for help at the right time. These skills may be able to smooth over small injustices and help students maintain engagement and an internal locus of control. Youth that perceive their lives as fair tend to have greater school engagement and better mental health because they feel part of the group and do not feel regularly threatened (Emler & Reicher, 2005). Children who are not taught these skills, and abide in schools with poor structure and support systems are more likely to suffer repeated injustices and tear away at their expectations that their efforts will be justly rewarded and that they will get what they deserve in future scenarios.

P-BJW has also been linked with many positive and pro-social behaviors. Students with a high P-BJW are more likely to confront a bully (Fox et al., 2010) and it predicts

proactive behavior to help victims (Silver et al., 2014), presumably because they are motivated to seek justice and believe it is attainable and have the internal locus of control to establish it. P-BJW has also been associated with a stronger growth mindset (Thomas et al., 2017), presumably because students felt like improvement was within their control. In contrast, the more children feel victimized and unfairly treated, the more aggressive they tend to be (Bondu & Krahe, 2015) and the stronger their feelings of exclusion (Umlauf & Dalbert, 2017).

Prior research on P-BJW in Brazilian youth has shown that they have a sophisticated view of injustices in the world and do not typically endorse strong beliefs of justice, especially those in public schools (Thomas & Rodrigues, 2020). It is important to remember that the BJW literature does not define justice, but there is substantial evidence that differences in the P-BJW construct point to actual differences in justice access, suggesting that justice is a form of capital that is not equally distributed (Thomas, 2021). Under this *justice capital* interpretation, children who report a lower P-BJW, have lives that are less fair, partially due to their authorities and microsystems. This is why researchers should look at specific characteristics of the context to understand how it is shaped and how it predicts measurable outcomes within these contexts. The current study interprets P-BJW to be a learned perspective and that a high P-BJW is a sign that a child has a relatively fair life where they can maintain a sense of control and safety.

It would be ill-advised to interpret the previously mentioned studies as a sign that people should believe their lives are fair. Instead, environments need to be constructed to ensure justice and safety. The reality is that the world is not fair, and children learn that early. But, growing up with the constant expectation of imminent injustice could foster an early sense of defeat or push children into a scarcity mindset out of a constant threat-perception. People who expect justice in their personal lives are less threatened by the fear of random injustices (Dalbert, 2009). Similarly, children who are engaged in a supportive and structured school environment feel a stronger sense of safety (Gregory et al., 2010).

To be clear, this is not simply about believing the world is fair; it is about having enough of a personal buffer to injustice because of relationally healthy environments. The current study will address if, despite being in an unequal society with many blatant injustices, a solid positive school environment can create that safe context where students can maintain a distance between the injustices of the environment and still act against injustice

by enacting virtues of fairness, bravery, and prosocial leadership.

This study hypothesizes that a positive school climate (high in support and structure) and teachers' usage of SEL strategies at Time 1 (T1) will positively predict students' P-BJW at Time 2 (T2) which will in turn predict the character outcomes of fairness, bravery, and prosocial leadership even after controlling for baseline character assessments. This study will test for direct and indirect effects of positive school climate and SEL on character outcomes to measure the hypothesized mediating effect of P-BJW.

Methods

Participants

Data from 2,309 fourth and fifth graders in 60 schools in Southern Brazil across two time points were collected in 2019. The final analysis included 1,865 students whose data were available on all of the variables of interest across both time points. Of this group, most of the sample self-identified as White (42.7%) or mixed-ethnicity (40.9%) with the rest identifying as indigenous (6.4%), Black (6.3%) and Asian (3.7%). Participants included in the final sample were children (48.30% boys) aged between 7 to 15 ($M_{age} = 9.81$; S. D. = .96) in fourth or fifth grade (including 164 classrooms and their teachers). The large age range is reflective of the Brazilian education system that has a high level of grade repetition (Organisation for Economic Co-Operation and Development [OECD], 2015). Brazilian educational data reveal that, in this region of the country, 15–18% of students in this grade level are not at the appropriate age for their grade (IBGE, 2010).

Procedures

The Research Ethics Committee at the Federal University of Paraná approved this study (CAAE 15187219.3.0000.0102). There were no incentives to participate in this study and parents provided informed consent and children provided oral assent and completed surveys during class time. Only students whose parents completed the informed consent were included in the analysis. A research assistant read a standardized script and students took approximately 40 minutes to complete it. The Brazilian school year follows the calendar year, beginning in February and ending in early December. Data were collected from 60 schools in a metropolitan area in Southern Brazil, including rural and urban

schools. The first time point was collected in August, 2019, and T2 was collected in October, 2019. This was originally intended to be two baseline assessments before an intervention, which was disrupted due to the Covid-19 pandemic. However, the longitudinal nature of this data allows for increased internal validity in statistical analyses.

Measures

Demographic data

Students were asked to self-report their grade (fourth or fifth), sex (male/female), ethnicity, and socioeconomic status (SES). Ethnicity was recorded based on five self-report categories in the Brazilian census. For purposes of understanding social privilege differences in ethnicity, this study categorized ethnicity as White/non-White. SES was measured based on the MacArthur Scale of Subjective Social Status (Adler et al., 2000). Students viewed a picture of a ladder and were asked to select what rung on the ladder their family was on in society and this was out of a scale of 1–10.

Authoritative school climate

This was assessed through the Delaware school climate inventory which has been previously translated and validated in a Brazilian sample (G. G. Bear et al., 2016). This survey is divided into two large sub-sections of support and structure. Each of these have additional subscales, but for parsimony can also be used as composite scores. The scale of Support had strong internal reliability ($\alpha = .86$) and included items such as 'teachers care about the students' with a total of 13 items. The scale of Structure had a total of 11 items with strong internal reliability ($\alpha = .85$) and items such as 'the rules are clear to students' and 'the consequences of breaking the rules are fair'. A latent factor of authoritative classroom climate was created using both support (factor loading = .99, $p < .05$) and structure (factor loading = .91, $p < .05$), with strong estimated reliability (omega reliability = .96).

Socio-emotional techniques

This was also assessed through the Delaware School Climate inventory (G. G. Bear et al., 2016) with a total of six items completed by the students. This scale had an acceptable internal validity ($\alpha = .65$) and sample items included 'Students are instructed to feel

responsible for their actions' and 'Students are instructed to understand how others think and feel'.

Character virtues

Three character outcomes were measured under this umbrella: Fairness, Bravery, and Pro-social Leadership. Fairness and Bravery were measured through the VIA youth survey (Park & Peterson, 2006) while Prosocial Leadership was measured based on work conducted in Canadian elementary schools (Yeung & Leadbeater, 2010). Fairness had acceptable internal reliability ($\alpha_{T1} = .65$; $\alpha_{T2} = .69$) and was measured with four items, such as 'I treat all with respect even when I don't like them'. Bravery had acceptable internal reliability ($\alpha_{T1} = .66$; $\alpha_{T2} = .68$) and was measured with four items (e.g., 'When I see that someone is being treated unjustly, I try to help'). Prosocial leadership had low internal reliability in the first assessment ($\alpha = .53$) and acceptable in the second wave ($\alpha = .63$). This was measured with seven items such as 'I offer to help my classmates' and 'I suggest good ideas when trying to solve a problem.'

Personal Belief in a Just World (P-BJW)

This was measured through Claudia Dalbert's scale (Dalbert, 1999) which has been extensively used in educational settings in multiple cultural contexts and previously used in Brazilian samples (Thomas et al., 2019). This scale consisted of seven items averaged together (e.g., 'I believe that I usually get what I deserve') and had acceptable internal reliability ($\alpha = .69$).

All items from all scales were translated then back-translated and measured on a four-point Likert scale and averaged together (-2 = not like me; -1 = a little like me; 1 = somewhat like me; 2 = a lot like me).

All items are included as a Supplementary File.

Analytic strategy

First, zero-order correlations were examined for all of the study variables in addition to t-tests to explore differences based on grade, gender and ethnicity. Hypothesis testing was conducted using multilevel structural equation modeling to account for the nested nature of the

data at the classroom level. The measures of virtues (fairness, bravery, and prosocial leadership) were the criterion variables. First, we accounted for the effects of the covariates (grade, gender, ethnicity, and SES) on each. Then we modeled the effect of starting scores on the later values leaving the remaining variability to be interpreted as change from baseline. Next, P-BJW was added as a correlate of each virtue measure. In the final model, the authoritative classroom climate and teacher's socio-emotional learning strategies were included on P-BJW and the measures of character virtues. We were then able to test the indirect effect of P-BJW on the associations between the classroom and teacher variables on fairness, bravery and prosocial leadership.

The factor structure of the three virtues were examined and noted that they are three distinct variables and do not function well as a latent variable. Thus, these are understood to be distinct but related characteristics which is why their correlation is accounted for in the final model.

Results

Descriptive statistics and zero-order correlations are provided in Table 1. Differences based on grade, gender, and ethnicity were compared using independent samples t-tests. Fourth-grade students reported significantly more teacher support and higher fairness, bravery and prosocial leadership compared to the fifth graders. Meanwhile, compared to boys, girls reported more teacher support, structure, and socio-emotional learning strategies in addition to higher fairness, bravery, and prosocial leadership as well. White students had significantly higher P-BJW and fairness. Finally, higher SES students were more likely to report higher P-BJW, more teacher support, structure and socio-emotional learning strategies and higher fairness, bravery and prosocial leadership. See Table 1 for all t-test results and Table 2 for the correlation table.

The unconditional model revealed that less than 5% of the variability in the character virtues and personal belief in a just world was at the classroom level. Nevertheless, for each of the variables, this represented a statistically significant proportion of classroom level variability ($p's \leq .03$) justifying a multilevel modeling approach. Hypothesis testing was then conducted using multilevel structural equation modeling. Gender, age, ethnicity, and SES were included as covariates first, mirroring the t-test and correlations. We then accounted for the starting values

on the later measures of fairness, bravery, and prosocial leadership, explaining 21.57%, 19.19% and 19.24% of the variability, respectively. Next, P-BJW (at Time 2) was added as a correlate of each virtue measure. As expected, P-BJW was positively related to fairness ($\Delta R^2 = 10.57\%$), bravery ($\Delta R^2 = 8.98\%$) and prosocial leadership ($\Delta R^2 = 13.82\%$).

Table 1. Difference across grade, sex, and ethnicity on all variables based on t test analysis.

	Grade				Sex				Ethnicity			
	4 th M(SD)	5 th M(SD)	t	df	Male M(SD)	Female M(SD)	t	df	White M(SD)	Non-White M(SD)	t	df
Support_T1	1.28 (.64)	1.22 (.56)	2.19*	1742.4	1.21 (.62)	1.29 (.58)	-2.93**	1921	1.25 (.59)	1.25 (.62)	0.14	1933
Structure_T1	1.296 (.73)	.124 (.65)	1.74*	1932	1.22 (.73)	1.31 (.64)	-2.708**	1919	1.27 (.68)	1.26 (.71)	0.163	1931
SEL_T1	.90 (.81)	.96 (.71)	1.36	1809.2	.90 (.76)	.98 (.76)	-2.193*	1917	.95 (.75)	.92 (.79)	0.64	1928
Bravery_T1	.93 (.99)	.99 (.03)	1.37	1930	.82 (.99)	.96 (.92)	-3.10**	1867.7	.92 (.94)	.85 (.99)	1.48	1563.6
ProLead_T1	.84 (.68)	.79 (.63)	1.73	1787.9	.79 (.66)	.84 (.65)	-1.82	1897	.81 (.65)	.81 (.66)	0.028	1906
Fairness_T1	.45 (1.05)	.41 (.98)	0.966	1789.5	.36 (1.02)	.50 (1.02)	-2.965**	1912	.43 (1.01)	.43 (1.02)	0.016	1922
PBJW_T2	.71 (.76)	.69 (.77)	0.405	2229	.69 (.78)	.74 (.75)	-1.36	1895	.67 (.77)	.74 (.76)	-2.19	2227
Bravery_T2	.98 (.9)	.89 (.92)	2.31*	2217	.87 (.64)	.99 (.88)	-3.02**	1843.2	.94 (.92)	.93 (.91)	0.293	2215
ProLead_T2	.92 (.66)	.85 (.66)	2.46*	2230	.84 (.69)	.92 (.64)	-2.55*	1858.9	.88 (.67)	.88 (.66)	-0.002	2228
Fairness_T2	.71 (.99)	.55 (.98)	3.87**	2219	.52 (.98)	.72 (.97)	-4.47**	1888	.57 (.99)	.69 (.97)	-2.78**	2217

Note. * $p < .05$, ** $p < .01$

In the final model, we included the authoritative classroom climate factor and teacher's socio-emotional learning strategies not only on P-BJW but on each of the virtue measures as well. This model also allowed us to test for the indirect effects of the classroom and teacher variables through P-BJW. A number of interesting associations emerged. First, authoritative classroom climate was positively related to teachers' socio-

emotional learning strategies ($r = .48, p < .001$). More interesting though, authoritative classroom climate was significantly positively related to P-BJW ($b = .36, 95\% \text{ CI } [.28, .44], p < .001$) and each of the virtue measures (bprosocial leadership = .16, 95% CI [.28, .44]; bbravery = .21, 95% CI [.13, .29]; bfairness = .28, 95% CI [.19, .36], p 's < .001). Above and beyond the effect of authoritative classroom climate, socio-emotional learning was related to significantly more P-BJW ($b = .16, 95\% \text{ CI } [.09, .22], p < .001$) and prosocial leadership ($b = .06, 95\% \text{ CI } [.02, .11], p < .001$) but not fairness or bravery.

Table 2. Correlation table of all variables.

	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Socio-economic Status	.076**	.047*	0.034	.075*	.089*	.066*	.067*	.091**	.105**	.081**
2. Support (T1)	1	.906**	.472**	.359**	.399**	.453**	.348**	.337**	.380**	.390**
3. Structure (T1)		1	.435**	.314**	.349**	.417**	.317**	.278**	.305**	.343**
4. Socio-emotional Lear. (T1)			1	.398**	.414**	.453**	.278**	.271**	.323**	.293**
5. Bravery (T1)				1	.445**	.509**	.215**	.461**	.344*	.638**
6. Prosocial Lead. (T1)					1	.456**	.266*	.332**	.456**	.334**
7. Fairness (T1)						1	.281**	.429**	.378**	.487**
8. Personal BJW (T2)							1	.347**	.437**	.374**
9. Bravery (T2)								1	.532**	.638**
10. Prosocial Lead. (T2)									1	.552**
11. Fairness (T2)										1

Note. * $p < .05$, ** $p < .01$

For all of the significant classroom and teacher effects on the virtue measures, part of the association was significantly indirectly through P-BJW ($\Delta b = .16-.90, p < .05$). This suggests that the impact of an authoritative classroom climate and teacher's use of socio-emotional learning strategies on the measures of virtue are partially a function of a stronger P-BJW. All told, the classroom and teacher variables accounted for 15.20% of the variability in P-BJW, whereas they explained an additional 3.18%, 2.34% and 3.41% in the measures on fairness, bravery, and prosocial leadership, respectively. See Figure 1 for the final model.

Discussion

The purpose of this study was to investigate how a supportive and structured school climate that focuses on socio-emotional development might construct children's expectations of justice and help them internalize virtues of communal living. The data confirm this, suggesting that

the school context predicts character virtues at least partially due to how the environment shapes youth's expectations of justice. When students are immersed in a structured and supportive environment and are scaffolded through SEL practices, they are more likely to perceive their lives as fair and thus are more likely to stick up for others, seek justice, and be prosocial leaders.

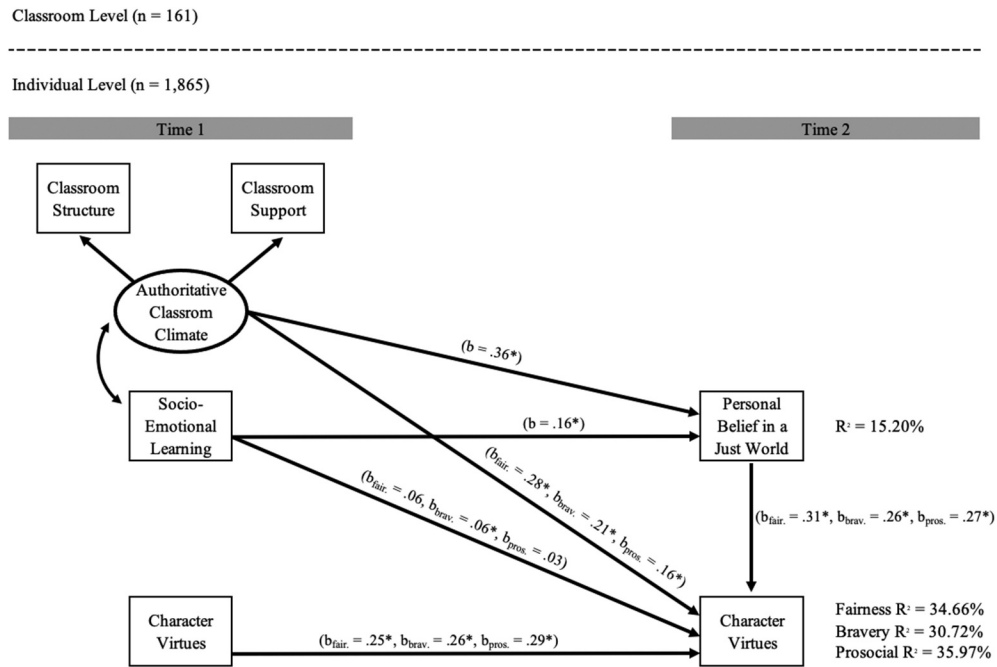


Figure 1. Final model predicting character virtues.

It is important to make two key distinctions. This study is not measuring General Belief in a Just World and does not suggest that people should believe the world is fair. A generalized assumption of justice has documented harmful effects related to victim-blaming (M. J. Lerner, 1980). The current study is specifically on *Personal*-BJW, which is likely more adaptive and indicative of their proximal environmental relations (Dalbert, 2009; Lipkus et al., 1996). The second distinction, and perhaps the most important, is that this study is to investigate the role that justice plays in providing the sense of agency necessary to foster character virtues that benefit others in the community. The study is limited with self-perception data, but it must be clear that the emphasis should be on the actual justice of their personal lives, not the belief of justice. The goal is not that children should believe their lives are just, but that their lives *should be just*.

Additionally, this study does not measure character education, though it is based on much literature on how character is fostered. The distinction of SEL and character education is currently under debate (Berkowitz, 2021), and this paper does not intend to replace character education with SEL. Instead, it shows the predictive value of school context variables on certain character virtues because of how they make students' proximal environments more predictable and nurturing.

Contextual justice & character virtues

Justice is one of the most fundamental aspects of character (Berkowitz, 2012), thus, how prevalent children perceive justice to be in their lives should be central to the discussion of character development. The results of the model predicted approximately a third of the variance in the character virtues of fairness, bravery, and prosocial leadership. This study further illuminates that nurturing contexts might be effective in fostering virtues because of how they make children's lives more just. This mechanism of influence is particularly relevant to study in children, since they are a vulnerable population with less power over their environment.

The data confirmed that a supportive and structured school climate that utilizes socio-emotional techniques, predicted 15% of the variance of P-BJW and indirectly predicted character virtues. The school climate meaningfully predicts how just children judge their lives to be. Considering all the other contributing factors to justice capital (family, friends, SES, ethnicity, society, etc.), the school environment is a meaningful component of their personal expectations of justice. This finding aligns with prior research and even has similar effect sizes (Thomas et al., 2019).

P-BJW is known to be connected to a sense of safety and agency (Dalbert, 2009). Thus, when children expect to be treated fairly, they are less threatened and more likely to believe their actions will make a difference. While there is limited research on P-BJW and character development, there is some evidence that has shown students with higher PBJW to be more likely to stand up to a bully (Fox et al., 2010). It is hard to imagine a 10- year-old that would have the moral fortitude to stand up to a bully if they did not believe it could make a difference in establishing justice. It only makes sense to engage in these character virtues, if there is some expectation of possible justice, especially because children have less social power. The current study demonstrates a strong connection between PBJW and all three character

measures, accounting for a significant indirect effect between SEL and virtues, and authoritative climate and virtues. Thus, justice should be measured when studying childhood character development. Children are sensitive to justice in the environment and their perceptions will influence their social actions.

Character is plastic and ever-changing (R. M. Lerner, 2018), and frequently adapts in response to context and relationships (Nucci, 2018). The current study reveals that school interventions should critically think about the justice in the lives of children and seek to make their lives more just by establishing a more authoritative climate and promoting SEL techniques.

Lapsley (2019) argues that the connection between SEL and character is theoretically sound yet under-investigated and that emotion regulation and conflict resolution are vital for moral action. Our analysis highlights a possible mechanism of how SEL can positively influence character development. When students learn to handle frustrations, seek help, and develop positive relationships with authorities, it indirectly makes their lives more just by giving them tools to self-advocate and be less vulnerable to injustices, increasing their justice capital. Put another way, the just context enabled the expression of character virtues.

An important finding to point out is that SEL did not meaningfully predict character outcomes after accounting for the children's perceptions of justice. This aligns with Berkowitz's (2021) recent criticism of SEL as a substitute for character education. SEL is not interchangeable with character, but does seem to play a key role in the process of virtue development, perhaps because of how it shapes the students' context and relationships. When children have strong socio-emotional skills, they may be able to smooth over some daily relational injustices. The child who learns to seek help and resolve problems more productively may be treated more fairly than the child who is quick to become aggressive or victimized. Those socio-emotional skills in turn may empower them to take positive social actions to help others, because they can regulate their emotions and make sense of their environment. In other words, SEL may improve character virtues because of how it increases justice access in the child's life.

Among notable correlations in the data, it is worth mentioning that SES had a consistent but small relationship across the measured variables. This likely reflects systemic injustice across social class. However, its effect was small and controlled for in the model,

which emphasizes the power that the school environment has in the child's life. The t-tests revealed that older children (fifth grade compared with fourth) and males (compared to females) had significantly lower character virtues and reported being in less supportive and less structured school climates. Eccles and Roeser (2012) point to how educational design and teacher expectations/beliefs can influence students' perceptions of and engagement with the school. Teachers and administrators should carefully consider sub-groups within the school that are at a developmental mismatch in the current climate. The current study boasts a number of strengths. First, we recruited a large sample of Brazilian children so as to reliably measure classroom level differences. As such, our analytic strategy also bolsters the ecological validity of these findings by examining individual differences while accounting for the variability at the level of the classroom. In addition, the use of a longitudinal approach also strengthens our ability to disentangle the nature of the observed associations. Finally, we believe that using multiple measures of character virtues allowed us to delineate how classroom environments were related to each uniquely. This study is novel in integrating known psychology of justice expectations and applied virtue development research and does so in a globally under-represented sample.

Limitations and future research

It is important to remember that character is not a compilation of traits (R. M. Lerner, 2018), and must be studied in specific contexts and relationships. The current study analyzed three specific character virtues and we would not expect the same model to explain other character constructs. This study chose those virtues over others because these have a clear benefit to others. This study is also specifically in children, and that is theoretically meaningful because they are more vulnerable to daily contextual injustices. We do not suggest that the same would be true in adult populations who are more often in peer-to-peer situations.

This study incorporates two time-points to help account for internal validity threats, but it does not show developmental trends and future research should seek to understand how these character virtues change across time, especially in school climate interventions. Relatedly, given the size of the sample in this study, most of the associations were statistically significant. These findings would benefit from being replicated to ensure that

these reflect consistent effects of classroom environments on character virtues.

Future studies should seek to replicate this in an experimental study to see how school-based interventions can help make children's lives more fair and to what extent this context of justice can help foster character virtues. A longer time frame and a control group would help to elucidate the bidirectional challenges of the existing data.

Conclusion

This study demonstrates the power of a just context in character development, elucidating the psychological mechanisms of how SEL and school climate may impact character development. When contexts are supportive, structured, and teach students how to manage emotions, they may foster character virtues, and do so through building expectations of justice that bolster students' abilities to engage in prosocial virtues.

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