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This is the final peer-reviewed author's accepted manuscript (postprint) of the following publication:

Published Version:

The warm glow of kindness: Developmental insight into children's moral pride across cultures and its associations with prosocial behavior / Peplak, Joanna; Bobba, Beatrice; Hasegawa, Mari; Caravita, Simona C S; Malti, Tina. - In: DEVELOPMENTAL PSYCHOLOGY. - ISSN 0012-1649. - STAMPA. - 59:12(2023), pp. 2320-2332. [10.1037/dev0001613]

Availability:

This version is available at: https://hdl.handle.net/11585/950009 since: 2024-02-03

Published:

DOI: http://doi.org/10.1037/dev0001613

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Peplak, J., Bobba, B., Hasegawa, M., Caravita, S. C. S., & Malti, T. (2023). The warm glow of kindness: Developmental insight into children's moral pride across cultures and its associations with prosocial behavior. *Developmental Psychology*, *59*(12), 2320–2332. <u>https://doi.org/10.1037/dev0001613</u>

The final published version is available online at: <u>https://doi.org/10.1037/dev0001613</u>

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The Warm Glow of Kindness: Developmental Insight Into Children's Moral Pride Across Cultures and Its Associations With Prosocial Behavior

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# Acknowledgements

The authors thank the children, parents, and teachers who participated in this research, as well as the research assistants at the Centre for Child Development, Mental Health, and Policy, the Catholic University of the Sacred Heart, and Yokohama University who helped collect and process the data.

This research was supported by a fellowship (Joseph-Armand Bombardier Canadian Graduate Scholarship) awarded to Joanna Peplak and grant funding from the Social Sciences and Humanities Research Council (grant number: 504464).

The authors have no conflicts of interest to report. All analytic codes and outputs are available here: <u>https://osf.io/zka6s/?view\_only=a1572290f3dc40788fd34da931d9af69</u>

Joanna Peplak served as lead for conceptualization, data curation, formal analysis, investigation, methodology, project administration, writing–original draft, and writing–review and editing. Beatrice Bobba served in a supporting role for conceptualization, data curation, formal analysis, project administration, and writing–review and editing. Mari Hasegawa served in a supporting role for writing–review and editing. Simona C. S. Caravita served in a supporting role for writing–review and editing. Tina Malti served as lead for funding acquisition and resources, contributed equally to methodology, and served in a supporting role for conceptualization and

writing-review and editing. Mari Hasegawa and Simona C. S. Caravita contributed equally to project administration.

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#### Abstract

Moral pride is a key component of virtue development. This study provides developmental insight into children's moral pride across cultures, and the potential for moral pride to underlie prosocial behavior. Participants included children and adolescents ages 6, 9, and 12 years from Canada (n = 186; 50% girls; ethnically diverse sample), Japan (n = 180; 48% girls), and a subsample from Italy (n = 86; 54% girls), as well as their primary caregivers or teachers. Moral pride was measured using a vignette procedure wherein children reported their emotions, emotion intensities, and reasoning following moral actions (harm omission and prosocial contexts). Global prosocial behavior was assessed via caregiver reports. Results revealed that moral pride increased from 6 to 9 years of age in Japanese and Canadian children (some similar trends were found in the Italian subsample) and that Canadian children reported stronger feelings of moral pride than Japanese children (Italian children's moral pride intensities were akin to those of Canadian children). Moral pride was positively associated with global prosocial behavior in Japanese children (and marginally in Italian children) but not in the Canadian children. These novel findings showcase the role of culture in shaping children's moral pride, and the potential for this moral emotion to reinforce children's commitment to prosocial action in childhood and early adolescence.

Keywords: moral pride, emotional development, prosocial behavior, culture, virtue development

## **Public Significance Statement:**

Moral pride—the warm glow that follows a moral action—is a vital part of a virtue development. This study showed that, although children are more likely to experience moral pride with age, the potential for moral pride to motivate prosocial action may be specific to certain cultural contexts. Ultimately, this work can inform interventions that nurture children's positive emotional repertoires and their kindness toward peers.

The Warm Glow of Kindness: Developmental Insight Into Children's Moral Pride Across

Cultures and Its Associations With Prosocial Behavior

Moral pride is a highly prized emotion that occurs following a morally relevant accomplishment (Hart & Matsuba, 2007; Krettenauer & Casey, 2015)—it is the "warm glow" experienced after, for example, helping someone in need or sharing a favorite snack. Moral pride is part of virtue development as it serves as a signal that one has acted in accordance with ethical goals and standards (Hart & Matsuba, 2007; Kristjánsson, 2002; Malti, Peplak, & Acland, 2020). Developmental transformations in moral pride over the childhood and adolescent years are theorized to underlie a commitment to long-term moral action, prompting positive self-esteem, and, in time, the development of one's moral identity (Brown & Marshall, 2001; Lefebvre & Krettenauer, 2019; Williams & Desteno, 2008). Nevertheless, despite the importance of moral pride in the formation of a *good* character (Kristjánsson, 2002), there is a dearth of developmental research (particularly across cultures) on moral pride and its role in moral life.

The present study contributes to the literature by assessing children's and adolescents' moral pride and its associations with prosocial behavior (i.e., behavior intended to benefit another; Eisenberg et al., 2015) in a sample of children ages 6, 9, and 12 years from Canada and Japan, and in an Italian subsample to gain further insight into cultural differences within a Western-European context that shares some characteristics with Eastern cultures. We chose these age groups due to advancements in moral emotional development (Eisenberg et al., 2015), moral norm internalization (e.g., Hardy et al., 2008), positive emotion differentiation (Kornilaki & Chlouverakis, 2004; Lagattuta & Thompson, 2007), and prosocial behavior (e.g., House et al., 2013) between early childhood to early adolescence. Furthermore, our culture of interest diverge in their social norms surrounding emotion and dimensions of individualism/collectivism that

render them unique contexts to consider when studying moral emotions (Hofstede, 2001; Mesquita & Leu, 2007). Our theoretical orientation is rooted in the Western individualistic perspective, as much of the theory and research on moral pride has stemmed from the West; however, throughout the article, we discuss the need to expand our understanding of moral pride beyond this lens.

#### **Defining Moral Pride**

Moral pride is a positively valanced self-oriented (or self-conscious) emotion, meaning that it stems from an evaluation of one's own behavior—particularly as it relates to internalized moral values, such as fairness and care (Malti, Peplak, & Acland, 2020). The focus of research on pride has been on distinguishing between authentic pride (i.e., when a behavior is associated with positive outcomes for oneself or another) and hubristic pride (i.e., a positive feeling attributed to an individual's global self-concept), and to understand how these subtypes are associated with socioemotional outcomes such as narcissistic tendencies (Tracy & Robins, 2007; van Osch et al., 2013). Here, we focus on authentic pride in the moral domain (i.e., *moral pride*) due to our interest in how children feel following moral acts (rather than their global self-evaluations) and the implications of these feelings on their own behavior (rather than for the welfare of the group). However, due to limited research on children's moral pride, we also summarize research on pride in nonmoral contexts (i.e., *pride*).

#### Cultural Patterns of Pride

Pride has a universally recognized nonverbal expression (Tracy et al., 2020) and is experienced cross-culturally (Aknin et al., 2013; Jia et al., 2019). However, the frequency and intensity with which individuals experience pride (both in moral and nonmoral contexts) is likely influenced by cultural norms, rules, and ideologies (Eid & Diener, 2001; Scollon et al., 2004; Tracy et al., 2020). Western cultures (e.g., the United States, Canada, and Western Europe) hold a positive attitude toward pride because these cultures emphasize autonomy, individuality, and uniqueness (i.e., independent self-construal), and pride in one's own accomplishments reinforces these traits. Nevertheless, there is variability in the extent to which countries within Western culture emphasize individuality. For example, Italian caregivers socialize both autonomy and relatedness (e.g., Claes et al., 2011); thus, pride following actions that benefit others may be particularly celebrated within Italian culture. On the other hand, pride is discouraged in many East Asian cultures (e.g., Japan, China, and South Korea) because these cultures tend to intertwine the self with social relationships and group membership (i.e., interdependent selfconstrual) and emotions that celebrate individual accomplishments (i.e., pride) may threaten the social harmony of relationships (Jia et al., 2019). Indeed, East Asians are expected to downplay their accomplishments in favor of modesty and self-criticism (Furukawa et al., 2012; Lee et al., 2001; Ng et al., 2007; Stipek, 1998).

Children's pride may also hinge upon cultural expectations surrounding display rules and "feeling rules" (Eid & Diener, 2001). In the West, cheerfulness has historically been a highly valued and is an expected expression (Stearns, 2022) and, in many southern European countries (e.g., Italy, Spain, and Greece), children's overt expressions of intense emotional states are encouraged (Halberstadt & Lozada, 2011). Conversely, East Asians tend to diminish emotional experience and expression (Halberstadt & Lozada, 2011; Markus & Kitayama, 1991). Indeed, children and adolescents from Western cultures (e.g., the United States and Canada) tend to feel stronger feelings of pride (in response to both moral and nonmoral actions) compared to children from Eastern cultures (e.g., Korea and Japan). Thus, the extent to which children feel proud and

express pride following their moral accomplishments likely varies as a function of societal norms regarding modesty and self-criticism, the nature of self-construals, and emotion norms.

#### Moral Pride in Childhood and Adolescence

Moral pride is galvanized, in part, by an understanding that prosociality benefits its recipients (Paulus & Moore, 2015) and is likely fostered by early parental support and encouragement following children's prosocial acts (e.g., comments such as "that was a kind thing to do"; Thompson, 2022). Children in Western cultures begin to experience pride-related emotions in toddlerhood such that by 2 years of age, toddlers exhibit greater happiness when giving treats to others than receiving treats themselves (Aknin et al., 2012) and after helping someone complete a goal (displayed through more upright postures that are akin to expressions of pride; Hepach, 2017). By early childhood, the majority of children reared in Western cultures express pride (measured via positive emotion in conjunction with behavioral indicators such as clapping) following prosocial behaviors (Ross, 2017; but see Etxebarria et al., 2014).

Across childhood, older children tend to report strong positive emotions, including moral pride, following prosocial acts compared to younger children (Ongley & Malti, 2014; Sabato & Eyal, 2022). Furthermore, adolescents tend to feel more positively about their moral decisions from middle to late adolescence, likely because they coordinate their feelings of moral pride with their emerging moral identities (Malti et al., 2013). Despite these early studies demonstrating pride development from early childhood through adolescence, still little is known about how pride in the moral domain unfolds across the childhood years, and how age-related trajectories may vary by culture.

# Moral Pride as a Motive for Prosocial Behavior

The motivational hypothesis of pride posits that moral pride incentivizes the pursuit of moral accomplishments despite short-term costs (Williams & DeSteno, 2008). Simply put, moral pride is a rewarding emotion and drives an individual to seek out the behavior that incites it, resulting in a reinforcement loop from prosocial behavior to moral pride back to prosocial behavior (Aknin et al., 2018). Although prosocial behavior developmentally precedes experiences of moral pride, moral pride becomes one form of fuel for prosocial acts throughout childhood. Indeed, a child may behave prosocially without feeling proud of their behavior in the early years (via instrumental helping or sharing due to goal alignment motivations or due to social norms; see Paulus, 2014); however, the advancement of empathy-related skills (e.g., perspective-taking) and the internalization of moral values likely position children to understand that their prosocial behavior results in positive interpersonal outcomes. This then prompts positive self-oriented emotions such as moral pride that ignites a desire to continuously engage ethically with others (Tangney et al., 2007). Moral pride also enhances self-respect (through reflection) and respect for others (through acknowledging the effects of one's good deeds on others), and as such, deepens one's commitment to leading a moral life (Hume, 1972; Kristjánsson, 2002; Malti, Peplak, & Zhang, 2020).

Research regarding associations between moral pride and independent assessments of prosocial engagement are limited and mixed. For example, Ross (2017) found that Scottish 3- to 4-year-olds' behavioral expressions of moral pride (e.g., head held high) were positively associated with independent assessments of prosocial behavior. On the other hand, Ongley and Malti (2014) did not find a significant association between Canadian children's (aged 4, 8, and 12 years) anticipation of positive emotions (i.e., proud, good, or happy) after a prosocial action and independent assessments of costly sharing behavior. The authors, however, did not consider

children's reasoning underlying their emotional responses, potentially conflating positive emotions that reflect moral pride (e.g., feeling good because their caring behavior helped the benefactor) with positive emotions that are rooted in nonmoral facets (e.g., feeling good because they followed a rule). In Western samples, adolescents' moral pride more reliably predicts prosocial behavior (Etxebarria et al., 2015; Krettenauer & Casey, 2015; Krettenauer et al., 2011), likely because adolescents have better integrated their moral pride with their moral identities compared to children whose sense of self continues to evolve (Hart & Matsuba, 2007).

We examined links between moral pride and independent assessments of global prosocial behavior (i.e., children's tendency to exhibit a number of prosocial behaviors across contexts and motives; Carlo & Randall, 2002) to explore its function in more general kindness toward others. Positive associations between moral pride and global prosocial behavior may provide initial indication that pride supports children's tendency to engage kindly with others across contexts and behavioral expressions (i.e., helping, sharing, and comforting).

#### **The Present Study**

This study is one of the first to explore children's spontaneous experiences of moral pride, how moral pride differs across age and cultural context, and associations between moral pride and prosocial behavior in childhood and early adolescence. We focused our cultural comparisons on Canadian and Japanese samples, and treated analyses with our Italian subsample as mostly exploratory (barring some preliminary hypotheses) because the Italian sample was substantially smaller and we had limited hypotheses regarding *unique* differences in moral pride and prosocial behavior in this cultural context compared to the Canadian context.

Our aims were threefold. Our first and second aims focused on investigating group differences in experiences of moral pride, such that we examined how children's moral pride varied by age (6, 9, and 12 years) and cultural context (Canada and Japan). We expected moral pride to be a common emotion expressed following prosocial action but we anticipated variations by age and culture. We expected older children (9- and 12-year-olds) to display more moral pride than younger children (6-year-olds) due to advances in social perspective-taking in older children (Vaish et al., 2009), and because older children are better able to integrate their moral behavior with their moral identity (Krettenauer et al., 2011). Regarding cultural variations in moral pride, we hypothesized that Japanese children would express lower mean levels of moral pride across ages compared to Canadian children due to differences in cultural norms surrounding positive emotion expression and pridefulness (Jia et al., 2019; Scollon et al., 2004). We anticipated similar (if not stronger) intensities of moral pride and age-related trends in Italian children compared to Canadian children (Halberstadt & Lozada, 2011). Our third research aim was to test associations between moral pride and prosocial behavior, and how these links may vary by cultural context. We hypothesized that children's moral pride would be positively associated with global prosocial behavior, but that links in Canadian (and Italian) children would be stronger than associations in Japanese children (Hertz & Krettenauer, 2016).

We ensured appropriateness of the research procedures in our cultures of interest. The materials were examined for cultural applicability by Canadian, Japanese, and Italian researchers and were revised when necessary. Our moral pride vignettes involved individualistic conceptions of emotional experiences; thus, measures were reviewed by Japanese schoolteachers and researchers to ensure that (a) they would be understood by children and (b) they appropriately reflected dilemmas that children frequently encountered in that culture. Some contextual adjustments were made as a result. Native Japanese and Italian speakers who were fluent in

English translated materials into Italian and Japanese, respectively. Materials were pilot tested to ensure validity across age groups.

## Method

#### **Participants**

Participants included children (N = 366) ages 6, 9, and 12 years from Southern Ontario in Canada (n = 186, 50% girls; 6-year-olds,  $n = 64, M_{age} = 6.23, SD = 0.58$ ; 9-year-olds, n = 59,  $M_{age} = 9.22$ , SD = 0.60; 12-year-olds, n = 63,  $M_{age} = 12.16$ , SD = 0.61), and from central Japan (n = 180, 48% girls; 6-year-olds, n = 54,  $M_{age} = 6.21$ , SD = 0.54; 9-year-olds, n = 68,  $M_{age} = 9.60$ , SD = 0.32; 12-year-olds, n = 58,  $M_{age} = 12.48$ , SD = 0.26)<sup>1</sup> as well as their primary caregivers (in the Canadian sample) or teachers (in the Japanese sample). Sample size was chosen based on a priori power analyses (Faul et al., 2009). For an analysis of variance (ANOVA) with main effects and interactions, a minimum total sample size of 337 was needed to find small-medium effects (f = 0.17 based on related research; see Malti & Krettenauer, 2013) with a power of 0.80. For multigroup modeling within a structural equation modeling framework with observed variables, we relied on the number of parameters to be estimated to identify the proper sample size (Jackson, 2003). As our model predicting global prosocial behavior included 40 parameters-the minimum requirement is five observations per parameter (Bollen, 1989). We also collected data from a subsample of children as well as their teachers from Northern Italy (n = 86, 54% girls; 6-year-olds,  $n = 23, M_{age} = 6.57, SD = 0.51$ ; 9-year-olds,  $n = 34, M_{age} = 9.65, SD$ = 0.69; 12-year-olds, n = 29,  $M_{age} = 12.86$ , SD = 0.35)<sup>1</sup>. Data collection in this culture halted prior to completion due to extenuating circumstances.

<sup>&</sup>lt;sup>1</sup> Ethical regulations allowed for researchers to only collect data on children's month and year of birth in the Japanese sample and year of birth in the Italian sample; thus, ages are approximate.

Data for this study were collected as part of a larger cross-cultural project on children's intergroup emotions and social behavior. Children and families from Canada were recruited from local elementary schools, community events (e.g., festivals, summer camps), and a preexisting database. Children and teachers from Japan and Italy were recruited from local elementary schools and middle schools. The sample from Canada was ethnically diverse and included participants from European (42.5%), Asian (15.5%), Central and South American (1.6%), and mixed (7.0%) ethnic backgrounds (5.9% chose not to answer; 27.5% missing). The sample from Japan had very low ethnic/racial diversity, with census data showing that 1.0%- 2.6% of individuals from the city in which the data were collected were of other ethnic origins. According to Census data from the district in which the data were collected, the sample from Italy was mildly diverse with 15.4% of individuals not identifying as Italian (ISTAT, 2021). Based on respective Census reports, the communities in Canada, Japan, and Italy from which the data were collected were of similar socioeconomic status, such that the majority of individuals were from middle class and upper middle class.

#### Procedure

The University of Toronto ethics review board approved all materials (protocol #35578) for data collection in Canada, Italy, and Japan. Additional ethics approval was granted by Yokohama City University in Japan (protocol #H-2018-2). Parents across cultural contexts provided written informed consent and children provided oral assent prior to study commencement. All children completed interviews in a private room at their school. The Canadian data were collected at the laboratory and in schools. The interview session was conducted by a trained research assistant and lasted approximately 30 minutes each, resulting in ~226 h of interview data collected across cultures. Children engaged in a battery of socialemotional responding tasks, including our moral pride assessment. Caregivers (Canadian sample) reported on children's global prosocial behavior and family demographics via a questionnaire. In the Japanese and Italian samples, teachers reported on their participating students' global prosocial behavior. Upon conclusion of the session, Canadian children received an age-appropriate book as a gift and parents were sent debriefing information. Japanese and Italian children were debriefed and thanked for their participation.

# Measures

#### Moral Pride

Moral pride was measured using a vignette procedure adapted from the social-emotional responding task (Malti, 2017; Malti et al., 2021) and cross-cultural research using vignette approaches to measure pride (Jia et al., 2019). This approach has been used in the assessment of moral emotions in children ages 4-12 years across diverse samples and cultures (Dys et al., 2019; Hasegawa, 2016; Nocentini et al., 2020). Due to linguistic limitations in measuring emotion cross-culturally (see Cowen & Keltner, 2017), we chose a granular but ecologically valid approach by considering children's positive affective responses (and their intensities; Krettenauer & Jia, 2013; Krettenauer & Johnston, 2011) alongside their reasoning for emotions (denoting the cognitive appraisals and motivations that differentiate discrete emotions; Ellsworth, 2013). We did not directly ask children to report on their feelings of pride because this method may have artificially imposed an expectation that one *ought* to feel pride and it does not allow participants to report other emotions that may spontaneously arise in a given context (FeldmanHall & Heffner, 2022).

The interviewer read two stories and participants were instructed to imagine they were the protagonist. The stories were presented alongside drawings from the first-person perspective to aid children's comprehension (see Figure 1). The first story, which was in the context of harm omission, depicted the child keeping their promise to spend time with a peer instead of engaging in a fun activity with another peer. The second story, which was in the prosocial context, depicted the child sacrificing their playtime to help a peer (see page 1 of the online supplemental materials for vignettes). We chose stories in these two contexts to capture children's pride following both proscriptive and prescriptive ethical actions (Sheikh & Janoff-Bulman, 2010). Similar stories have been used cross-culturally (e.g., Hasegawa, 2016). Furthermore, both actions were costly (which facilitates experiences of pride; Lewis et al., 1992) as demonstrated in children's ratings of how much they liked each task/activity they had to give up to engage in the hypothetical moral act (i.e., playing new games in the harm omission story,  $M_{\text{Canada}} = 2.50$ ,  $M_{\text{Japan}} = 2.19, M_{\text{Italy}} = 2.53$ , going outside to play in the prosocial context,  $M_{\text{Canada}} = 2.37, M_{\text{Japan}} =$ 2.43,  $M_{\text{Italy}} = 2.62$ ) on a scale from 1 (not at all) to 3 (very much). Japanese and Italian names were used in the place of common English names within stories for data collection in Japan and Italy, respectively. Drawings were also adapted to each cultural context. Stories and drawings were gender- and skin-tone-matched to the child to reduce any effects of intergroup bias on emotional responses.

Following the presentation of each story, children reported their spontaneous emotions ("how would you feel if you had done this?") and emotion intensity ("how strongly would you feel [reported emotion]?") on a scale from 1 (*not much*) to 3 (*very much*). Then, children explained their reasoning for emotions ("why would you feel [reported emotion]?"). Participants reported up to two emotions and were prompted if they only mentioned one emotion ("would you feel any other emotion?"). Twelve to 34% of children reported two emotions across cultures and stories. Children were shown an emotion scale with facial expressions that depicted

neutrality, happiness, sadness, anger, surprise, and fear to supplement their comprehension and limit language difficulties. Children were instructed to select the emotion they were feeling using the scale, but that they could report other emotions that were not represented by the scale if they wished.

**Coding.** To calculate moral pride scores (0 = no moral pride to 3 = strong moral pride), children's positive emotions were combined with their emotion intensity and qualified by the presence of ethical reasoning to distinguish moral pride from nonethically relevant positive feelings that may result from moral action (see Jambon et al., 2022). Below, we describe our process of binary coding emotions and reasoning, then demonstrate how we derived our continuous moral pride scores.

*Binary Coding Emotions and Reasoning.* Emotions were first binary coded, such that reports of positive emotions including happiness and other variations such as good and proud were binary coded (0 = absence of positive emotion, 1 = presence of positive emotion). Reasoning was coded using thematic analysis, relying on previously developed and validated schemes identifying ethical and nonethical reasoning (e.g., Jambon et al., 2022). Specifically, five categories pertained to ethical considerations: (a) principle of care, (b) fairness and rights, (c) moral identity, (d) relationships, (e) counterfactual ethical reasoning. Nonethical reasoning categories included social conventional or sanction-based concerns, self-oriented reasoning, personal freedom, minimization, and other or unelaborate reasoning. See Table S1 in the online supplemental materials for detailed descriptions of categories and prototypical examples. Up to two lines of reasoning were coded. Interrater reliability on ~20% of the data was established by two independent coders and consensus was determined for the final coding ( $\kappa_{Canada} = .88$ ;  $\kappa_{Japan} = .85$ ;  $\kappa_{Italy} = .91$ ). Children's ethical reasoning was then also binary coded such that reasonings pertaining to ethical considerations were coded as 1 and themes not pertaining to ethical considerations were coded as 0. Binary scores for children's positive emotions *and* ethical reasoning were multiplied together such that if a child reported a positive emotion in conjunction with an ethical reasoning (regardless of whether it was their first or second reported emotion), they were given a score of 1.

We included ethical reasoning within our moral pride assessment because it demonstrates self-evaluation (a core component of moral pride). Although this self-evaluative process may not be explicit, positive responses that are accompanied by moral reasons signal that children have reflected upon and acknowledged their morally relevant behavior. For example, if a child expresses feeling happy for completing a prosocial act because their behavior was fair, they have acknowledged that their action was in line with the ethic of fairness (Tangney et al., 2007).

*Moral Pride Scores.* Next, consistent with previous research (e.g., Jambon et al., 2022; Krettenauer & Casey, 2015), we multiplied children's combined binary emotions/reasoning scores (1 = both positive emotion and ethical reasoning present, 0 = positive emotion and/or ethical reasoning absent) by children's reported emotion intensity scores (1-3), resulting in a 4point scale of moral pride from 0 (no moral pride reported) to 3 (strong moral pride reported).

In our analyses, we tested links between moral pride by story context and prosocial behavior, but also combined moral pride across contexts (mean score) to assess children's general tendency to experience pride following moral behavior. Correlations of moral pride across contexts were as follows: Canadian sample r = .34, p < .001, and Japanese sample r = .23, p = .002. Moral pride across story contexts was not significantly correlated in the Italian sample (r = -.09, p = .41) and thus the two scores were kept separate for all analyses in this subsample. *Prosocial Behavior* 

Global prosocial behavior was assessed via caregiver reports (parent reports in the Canadian sample and teacher reports in the Japanese and Italian samples) using the Prosocial Behavior Subscale of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). The SDQ is widely used to evaluate children's psychological functioning and has previously shown good psychometric properties in Canadian, Japanese, and Italian samples (Hoffmann et al., 2020; Matsuishi et al., 2008; Tobia et al., 2013). The Prosocial Behavior subscale includes five items (e.g., "my child/this student is helpful if someone is hurt, upset or feeling ill") measuring children's general tendency to engage kindly with others across various prosocial acts (i.e., helping, sharing). Reliability across items was good to excellent in all cultural contexts ( $\alpha_{Canada} =$ .79,  $\alpha_{Japan} = .89$ ,  $\alpha_{Italy} = .90$ ). Parents/teachers in the Canadian and Italian samples reported on a scale from 1 (not at all true) to 6 (almost always true), while teachers in the Japanese sample reported on a scale from 0 (not at all true) to 6 (almost already true). We used a larger scale format than the original 3-point scale to capture more variability. Data were rescaled to a 6-point scale for the data in the Japanese sample to calculate measurement invariance and to measure mean-level differences across cultures. Items were averaged to create a composite score of prosocial behavior for analyses.

#### Missing Data

A relatively small amount of data were missing. In the Canadian sample, data were missing for: moral pride (14.0%; n = 26 across both contexts) and global prosocial behavior (14%; n = 26). Missingness was contributed to either late implementation of study tasks or because caregivers chose not to complete the questionnaire. In the Japanese sample, one child (0.6%) did not report on their moral pride in the harm omission context. In the Italian sample, data were missing for: moral pride in the prosocial context (1.2%; n = 1) and global prosocial

behavior (9.3%; n = 9; due to teachers not completing the questionnaire). Little's Missing Completely at Random test conducted on all study variables was nonsignificant across cultural contexts: Canada,  $\chi^2(7) = 6.27$ , p = .51; Japan,  $\chi^2(8) = 7.34$ , p = .50; and Italy,  $\chi^2(4) = 4.41$ , p = .35. This indicates that the pattern of missing data was not associated with observed scores across the study variables. The data were handled using full information maximum likelihood.

# Data Analytic Strategy

Descriptive analyses and mean-level differences were assessed using IBM SPSS Version 27 for Windows. The remaining analyses were conducted in M*plus* 8.5 (Muthén & Muthén, 2017) using the maximum likelihood robust estimator (Satorra & Bentler, 2001). As a preliminary step, we conducted consequential multigroup confirmatory factor analyses to assess measurement invariance of global prosocial behavior across cultures (e.g., van de Schoot et al., 2012; see pages 4-5 of the online supplemental materials and Table S2 in the online supplemental materials for details).

We first described each facet of our moral pride measure (positive emotion intensity and reasoning separately). Where possible, we displayed findings by story context (to demonstrate possible context differences). We conducted a repeated measures ANOVA to test group differences in moral pride by context (harm omission and prosocial contexts) and a univariate ANOVA in the Canadian and Japanese samples to assess age group and cultural differences in our aggregate moral pride score. We then investigated associations between moral pride (by story context and overall) with global prosocial behavior across cultures using multigroup analyses in two separate models. This was accomplished by comparing the chi-square values of models with the regression parameters across the two cultural contexts constrained to equality to models with the parameters freely estimated. We then tested differences in the strength of the

effects of moral pride on prosocial behavior across cultural contexts by employing the Wald test of parameter constraints. Both models accounted for the nested structure of the data by controlling for classroom-level variance (*Type=Complex* command in M*plus*). We controlled for age group and gender (dichotomous variables) in the model. We then explored our research questions in the subsample of Italian children by first examining age group differences in moral pride (separately by context) via a repeated measures ANOVA and then conducted a regression analysis to test links between moral pride and global prosocial behavior.

#### **Transparency and Openness**

We report how we determined our sample size, missing data, all manipulations, and we follow Journal Article Reporting Standards (Kazak, 2018). Data are not available due to ethical restrictions; however, we have shared all analytic codes and outputs (see Peplak et al., 2023). This study's design and analyses were not preregistered.

#### **Results**

# **Canadian and Japanese Samples**

#### **Descriptive Statistics**

When examining emotions, children across cultures most often reported positive emotions (i.e., happy, good, proud; 44.8%), followed by neutrality (28.8%), and sadness (19.4%) following hypothetical moral acts. Canadian children most often reported positive emotions (68.8% of the emotions reported), followed by sadness (14.1%) and neutrality (13.3%), and 56.1% provided ethical reasoning. Japanese children most often reported neutrality (43% of the emotions reported), followed by sadness (24.1%) and positive emotions (23.4%), and 24.1% provided ethical reasoning. The intensity of positive emotions varied by culture, F(1, 331) =230.14, p < .001,  $\eta_p^2 = .41$ , such that Canadian children experienced more intense positive emotions following moral acts than Japanese children ( $M_{diff} = 1.54$ , d = 1.65). A repeated measures ANOVA showed that the intensity of positive emotions reported varied by context, Wilk's  $\lambda = .99$ ,  $F(1, 331) = 5.06 \ p < .001$ ,  $\eta_p^2 = .015$ , Cohen's d = 0.15, such that children reported stronger positive emotions in the prosocial context than the harm omission context. Canadian children were more likely than Japanese children to provide ethical reasoning following their emotions in the harm omission context,  $\chi^2(1) = 48.78$ , p < .001, d = .82, and the prosocial context,  $\chi^2(1) = 39.23$ , p < .001, d = .72, which maps onto higher rates of positive emotions indicated by Canadian children. Average intensities of moral pride (i.e., positive emotions that were supported by ethical reasoning) by story context and across contexts are displayed in Figure 2. Group differences in moral pride are discussed below.

Means, standard deviations, and bivariate correlations of our main study variables are displayed in Table 1. Age group and cultural context differences in prosocial behavior are discussed and displayed in Figure S1 in the online supplemental materials.

#### Moral Pride Across Age Group and Culture

To assess the first and second aims of the study, we examined age group and cultural differences in moral pride (as a mean score then by story context) across Canadian and Japanese samples. We found a main effect of age group, F(2, 334) = 7.79, p < .001,  $\eta_p^2 = 0.05$ , such that 6-year-olds reported less moral pride than 9-year-olds (p = .014, d = 0.38) and 12-year-olds (p = .001, d = 0.50). We also found a main effect of culture, F(1, 334) = 121.60, p < .001,  $\eta_p^2 = 0.27$ , with Japanese children reporting less moral pride than Canadian children (p < .001, d = 1.20; see Figure 2a).

When assessing moral pride across contexts, we found a small main effect of context, Wilk's  $\lambda$ = .99, *F*(1, 333) = 3.90, *p* = .049,  $\eta_p^2$  = 0.012, *d* = 0.13, such that children reported higher rates of moral pride in the prosocial context than the harm omission context (see Figure 2b). No age group nor culture by story context effects were found.

#### Moral Pride and Links With Prosocial Behavior

We found a significant effect of moral pride (mean score) on global prosocial behavior by cultural context,  $\chi^2(1) = 24.05$ , p < .001 (see Table 2). Contrary to our expectations, moral pride was positively associated with global prosocial behavior in the Japanese sample, but not the Canadian sample. Wald's test of parameter constraints showed that the strengths of the paths were significantly different across cultures,  $\chi^2(1) = 5.32$ , p = .02.

We further examined effects by context (see Table 3) and found that the association between moral pride in the harm omission context and prosocial behavior marginally varied by culture,  $\chi^2(1) = 3.29$ , p = .070. Specifically, moral pride in the harm omission context was positively associated with global prosocial behavior in Japanese but not in Canadian children, Wald's test of parameter constraints  $\chi^2(1) = 4.64$ , p = .031. Interestingly, associations between moral pride in the prosocial context and global prosocial behavior did not significantly vary by culture.

#### Italian Subsample

### Descriptive Statistics and Moral Pride by Age Group

Italian children most often reported positive emotions following moral actions in the harm context and prosocial context (64.5%, 62.3%, respectively), followed by sadness (14.5%, 21.9%) and neutrality (7.3%, 5.3%). This was similar to the Canadian sample in rank order but the Italian children showed stronger experiences of positive emotion. Regarding reasoning, 54.7% and 58.1% provided ethical reasoning across story contexts. No differences in positive emotion intensities were found by story context. Average intensities of moral pride by story

context are displayed in Figure 3. No main effects of story context on moral pride, nor age group by story context were found.

Means, standard deviations, and bivariate correlations of study variables for the Italian sample are displayed in Table 1. See the online supplemental materials for rates of prosocial behavior by age group.

#### Moral Pride and Links With Prosocial Behavior

Associations between moral pride in the harm omission context and global prosocial behavior (controlling for age group and gender) in this subsample were non-significant; however, moral pride in the prosocial context and prosocial behavior was marginally associated at p < .10, suggesting that there may be small effects present that we did not have the power to detect (see Table 4).

#### Discussion

This study takes important steps toward understanding moral pride across childhood and culture and proposes an additional motivational pathway to kindness beyond empathy- and guilt-related emotions (Peplak & Malti, 2022; Malti et al., 2016) and general positive affect (Aknin et al., 2018). Results revealed cultural commonality in age cohort increases of moral pride and cultural specificity in its links with prosocial behavior, providing novel insight into the broader significance of moral pride in-culture and its implications for virtue development in the early years.

Canadian and Japanese children ages 9 and 12 years reported stronger feelings of moral pride compared to 6-year-olds. This trend was similar in the Italian subsample for moral pride in the prosocial context (although not statistically significant). Previous research has shown that children experience pride-related emotions and recognize facial expressions of pride in early childhood (Tracy & Robins, 2004); however, moral pride may not be distinguished from other positive emotions (and nonmoral forms of pride) until late childhood and early adolescence (see Kornilaki & Chlouverakis, 2004). This may be due, in part, to shifts in what children feel proud of. Indeed, young children are more likely to experience pride due to physical characteristics (e.g., height), whereas adolescents are more likely to attribute pride to interpersonal moral traits (e.g., being friendly, well respected, and helpful; Rosenberg, 1979). This shift may also be due to the development of children's self-concepts, such that, with age, children begin to focus more on growing toward their ideal self (Krettenauer & Stichter, 2023; Malti et al., 2021). As a result, older children and adolescents become sensitive to positive outcomes that are in line with their self-ideals and thus more likely to experience moral pride.

We also found differences in moral pride by cultural context. Specifically, bolstering previous research on cultural differences in pride more broadly (see Furukawa et al., 2012; Krettenauer & Jia, 2013), Japanese children experienced significantly lower levels of moral pride than did Canadian children (with Italians demonstrating similar intensities of moral pride compared to Canadian children). East Asian cultures are typically less accepting of pride and perceive it to be less desirable than Western cultures, due to the importance of modesty and the preservation of group harmony in East Asian cultural tradition (Lee et al., 2001). Furthermore, Japanese children in our study who expressed "neutral" responses following moral actions may have been adhering to conventions surrounding emotion suppression. In Western cultures, on the other hand, individual accomplishments are emphasized and pride is promoted within early socialization experiences (Eid & Diener, 2001; Tracy & Robins, 2007), which is likely why most Canadian and Italian children experienced moral pride. Western society's acceptance of and Eastern society's resistance to pride is showcased in our findings.

Regarding links with prosocial behavior, we found that moral pride was positively associated with children's global prosocial behavior (which was driven by moral pride following harm omission), but only in Japanese children (and marginally in Italian children). Although we anticipated that this association would be stronger in children within Western contexts, it is possible that our finding may stem from differences in perceptions surrounding the social benefits of pride following moral behavior-particularly behavior that reduces harm and maintains social bonds (via keeping a promise; see Hasegawa, 2016). That is, Japanese children who experienced high levels of pride following their moral actions despite societal expectations to suppress pride in favor of modesty and humility, may have perceived moral pride to be beneficial for the group, and believed it promoted rather than threatened the social harmony of relationships (Jia et al., 2019). In fact, Stipek (1998) showed that Chinese participants rated pride as valuable in contexts where achievements benefited close others, suggesting that pride that is socially relevant may be more accepted than pride following personal accomplishments. While the excessive display of pride is not viewed favorably within Japanese culture, moral pride itself may have positive value in relational contexts, and those who recognize this may be able to extend their kindness more consistently. In this respect, Japanese children may be trapped in a sort of paradox whereby pride is largely discouraged but has sociomoral advantages if experienced in response to moral acts.

Regarding the Canadian sample, the lack of association between moral pride and prosocial behavior might be due to the specific age groups assessed in this study. It is possible that links between moral pride and prosocial behavior only emerge during adolescence when youth have more comprehensively fused their values with their emotions and actions, and when their moral identity becomes more promotion-oriented and internally motivated (Hart & Matsuba, 2007; Krettenauer & Stichter, 2023). Indeed, evidence for links between moral pride and prosocial behavior have been previously found in adolescent samples from Western contexts (see Krettenauer et al., 2011), but not in child samples (Ongley & Malti, 2014). Another possibility is that moral pride in the Canadian contexts was driven, in part, by image improvement (Dovidio & Penner, 2004). The image improvement hypothesis posits that pride functions to bolster an individual's perceived image in the community and solidify the individual's status in a group (Tracy & Robins, 2004). Moral pride that occurs (solely or in part) by image improvement may not necessarily translate into increased moral action—particularly when prosocial behavior is costly or private/anonymous.

Regarding the Italian subsample, we found marginally positive associations between moral pride in the prosocial context and prosocial action (the standardized beta coefficient was similar in magnitude to that of the Japanese sample). This finding may reflect the socialization goals of Italian families, such that they focus on promoting both individuality (typical of Western societies, which may explain why we found high intensities of moral pride following moral action in Italian children), but also relatedness (typical of Eastern societies; Claes et al., 2011). Thus, it is possible that associations between moral pride and prosocial action emerge in cultures that are more interdependent in their values.

Future work calls for researchers to examine links between children's moral pride and prosocial behavior across a variety of informants (i.e., parents, teachers, and peers) as parent reports alone may not accurately capture the lengths of children's prosocial action (particularly toward their peers in school contexts). It is possible that the links between moral pride and prosocial behavior are informant-specific as teachers compared to parents may better capture variability in children's prosocial action toward peers. Teachers are also able to observe children's behavior across a variety of situations and for a large portion of the day. Furthermore, measuring moral pride following different types of moral duties and prosocial behaviors (e.g., sharing, comforting) will help us understand the extent to which moral pride is generalizable across contexts (i.e., whether moral pride in one context may promote behavior in another or whether moral pride following sharing only promotes sharing behavior).

### Implications

The findings of this study may inform age-appropriate and culturally sensitive interventions that aim to foster children's social-emotional and moral development (Beelmann & Lutterbach, 2022). First, we demonstrated that moral pride develops from early to late childhood (6-9 years of age), thus offering a "window of opportunity" for promoting moral pride through age-appropriate methods (Masten et al., 2009). For example, parents and teachers may wish to tell stories or show videos of characters performing moral acts and highlight the positive morally relevant emotions that the characters might feel following their actions. This may tune children into the intra- and interpersonal (and potentially intergroup) benefits of moral pride and encourage their own expressions of the emotion. Deliberately tying positive emotions with moral reasoning following moral acts (e.g., "this character felt happy *because* he treated others the way he would want to be treated" [the golden rule]), particularly in early childhood, may strengthen experiences of moral pride across development. Nevertheless, cultural values pertaining to emotion expression and modesty need to be considered when socializing this emotion.

Furthermore, our findings show that moral pride was differentially associated with children's prosocial behavior by cultural context. Therefore, as alluded to above, future interventions aimed at promoting children's prosocial behavior should account for the contextual dependency of social-emotional and prosocial development (Castro & Yasui, 2017). For

instance, although moral pride was linked to higher prosocial behavior in the Japanese sample, it should be noted that, within this culture, pride is generally discouraged as it harms social harmony (Jia et al., 2019). Therefore, differentiating *moral* pride from *nonmoral* pride may be critical.

### **Limitations and Future Directions**

As with any study, this work has some limitations. Due to the cross-cultural and developmental nature of this study, we avoided using the word "pride" in its measurement and instead assessed children's positive emotions in conjunction with their ethical reasoning as indicators of moral pride (see Krettenauer & Casey, 2015). Despite the strength of using this approach, it remains unclear how closely our assessment of moral pride reflected children's true experiences of pride (particularly for Japanese children). Our assessment of pride may have also reflected, in part, positivity resonance (Zhou et al., 2022); thus, future work may wish to assess moral pride using multiple methods. Additional qualitative research would be necessary to better understand children's conceptualizations of moral pride across cultures, and whether children experience moral pride at both the individual and collective level (Kristjánsson, 2002). We also only measured pride within two specific contexts: harm omission (keeping a promise) and prosociality (helping). Future research would benefit from examining feelings of pride following a range of behaviors with varying costliness across these two contexts. Next, we gathered parent or teacher ratings of global prosocial behavior and these informants may have observed prosocial behavior from different lenses. Furthermore, although we provide insight into age-related changes in moral pride across the childhood years, our study was cross-sectional and thus limits our ability to understand both the mechanisms underlying the development of moral pride and the causal direction of the link between moral pride and prosocial behavior. Future research

would benefit from adopting a longitudinal design to gather more insight into these issues. Additionally, researchers may consider important mediators or moderators in the association between moral pride and prosocial behavior such as social-emotional skills (e.g., perspectivetaking), intergroup factors (e.g., individual vs. group-oriented pride), and context. Finally, investigating associations between moral pride with private and publicly displayed prosocial acts can help us understand the function of this emotion (i.e., whether it is to improve one's image or reinforce one's values and identity).

# Conclusion

Moral pride has long been conceptualized as a pillar of ethical life and virtue development (Kristjánsson, 2002). We showed that childhood, particularly between middle to late childhood, may be a prime window for moral pride development across cultural contexts. We also showed that moral pride, in certain cultures, may underlie generalized prosocial action in childhood and early adolescence. This study takes some of the first steps toward better understanding children's pride and its role in moral life in the early years.

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| Variables |                                     | M    | SD   | 1 | 2      | 3           | 4          |
|-----------|-------------------------------------|------|------|---|--------|-------------|------------|
| Cand      | ada                                 |      |      |   |        |             |            |
| 1.        | Moral pride – harm Omission Context | 1.49 | 1.37 | - | .34*** | $.82^{***}$ | .07        |
| 2.        | Moral pride – prosocial Context     | 1.68 | 1.39 |   | -      | $.82^{***}$ | 03         |
| 3.        | Moral pride (mean score)            | 1.58 | 1.13 |   |        | -           | .03        |
| 4.        | Global prosocial behavior           | 5.07 | 0.67 |   |        |             | -          |
| Japa      | In                                  |      |      |   |        |             |            |
| 1.        | Moral pride – harm omission context | 0.40 | 0.96 | - | .23**  | .06         | $.20^{**}$ |
| 2.        | Moral pride – prosocial context     | 0.52 | 1.09 |   | -      | .81***      | .15*       |
| 3.        | Moral pride (mean score)            | 0.46 | 0.80 |   |        | -           | .23**      |
| 4.        | Global prosocial behavior           | 3.72 | 0.88 |   |        |             | -          |
| Italy     | (subsample)                         |      |      |   |        |             |            |
| 1.        | Moral pride – harm omission context | 1.45 | 1.35 | - | 09     | .10         | -          |
| 2.        | Moral pride – prosocial context     | 1.48 | 1.39 |   | -      | .16         | -          |
| 3.        | Global prosocial behavior           | 4.73 | 1.08 |   |        | -           | -          |

Means, Standard Deviations, and Bivariate Correlations Across Study Variables in the Canadian and Japanese Samples

\* p < .05 \*\* p < .01 \*\*\* p < .001

|                                |      |        |       |       | 95%    | 6 CI  |
|--------------------------------|------|--------|-------|-------|--------|-------|
|                                | β    | В      | SE    | р     | LL     | UL    |
| Canada                         |      |        |       |       |        |       |
| Age group $(1 = 9$ -year-olds) | .072 | 0.103  | 0.054 | .057  | -0.003 | 0.210 |
| Age group (1 = 12-year-olds)   | .182 | 0.256  | 0.058 | <.001 | 0.143  | 0.370 |
| Gender $(1 = girls)$           | .158 | 0.211  | 0.063 | .001  | 0.087  | 0.335 |
| Moral pride                    | 028  | -0.016 | 0.055 | .767  | -0.124 | 0.092 |
| $R^2$                          | .050 |        |       |       |        |       |
| Japan                          |      |        |       |       |        |       |
| Age group (1 = 9-year-olds)    | .263 | 0.476  | 0.101 | .010  | 0.082  | 0.871 |
| Age group (1 = 12-year-olds)   | .415 | 0.781  | 0.102 | <.001 | 0.384  | 1.178 |
| Gender $(1 = girls)$           | .226 | 0.379  | 0.114 | .066  | -0.025 | 0.783 |
| Moral pride                    | .177 | 0.195  | 0.073 | .008  | 0.051  | 0.339 |
| $R^2$                          | .228 |        |       |       |        |       |
|                                |      |        |       |       |        |       |

Multigroup Analysis Examining Associations Between Moral Pride (Aggregate Score) and Prosocial Behavior Across Canadian and Japanese Children

*Note.* Statistically significant effects are bolded. CI = confidence interval, LL = lower limit, UL = upper limit.

Multigroup Analysis Examining Associations Between Moral Pride by Story Context and Prosocial Behavior Across Canadian and Japanese Children

|                                 |        |        |       |       | 95%    | 6 CI  |
|---------------------------------|--------|--------|-------|-------|--------|-------|
|                                 | β      | В      | SE    | р     | LL     | UL    |
| Canada                          |        |        |       |       |        |       |
| Age group (1 = 9-year-olds)     | 0.080  | 0.115  | 0.052 | .028  | 0.013  | 0.218 |
| Age group (1 = 12-year-olds)    | 0.195  | 0.274  | 0.065 | <.001 | 0.147  | 0.402 |
| Gender $(1 = girls)$            | 0.166  | 0.221  | 0.071 | .002  | 0.082  | 0.361 |
| Moral pride – harm omission     | 0.074  | 0.036  | 0.029 | .216  | -0.021 | 0.093 |
| Moral pride – prosocial         | -0.114 | -0.055 | 0.068 | .419  | -0.188 | 0.078 |
| $R^2$                           | 0.062  |        |       |       |        |       |
| Japan                           |        |        |       |       |        |       |
| Age group $(1 = 9$ -year-olds)  | 0.262  | 0.475  | 0.203 | .019  | 0.077  | 0.873 |
| Age group $(1 = 12$ -year-olds) | 0.417  | 0.783  | 0.204 | <.001 | 0.383  | 1.183 |
| Gender $(1 = girls)$            | 0.221  | 0.389  | 0.207 | .060  | -0.017 | 0.794 |
| Moral pride – harm omission     | 0.168  | 0.154  | 0.047 | .001  | 0.063  | 0.246 |
| Moral pride – prosocial         | 0.064  | 0.052  | 0.053 | .328  | -0.052 | 0.155 |
| $R^2$                           | 0.234  |        |       |       |        |       |

*Note*. Statistically significant effects are bolded. CI = confidence interval, LL = lower limit, UL = upper limit.

Linear Regression Examining Associations Between Moral Pride (by Context) and Prosocial Behavior in Italian Children

|                                 |      |        |       |       | 95% CI |       |
|---------------------------------|------|--------|-------|-------|--------|-------|
| Variables                       | β    | В      | SE    | р     | LL     | UL    |
| Age group $(1 = 9$ -year-olds)  | 189  | -0.415 | 0.311 | 0.182 | -1.024 | 0.194 |
| Age group $(1 = 12$ -year-olds) | 254  | -0.576 | 0.341 | 0.091 | -1.245 | 0.092 |
| Gender $(1 = girls)$            | .232 | 0.498  | 0.256 | 0.052 | -0.004 | 1.000 |
| Moral pride – HO context        | .068 | 0.054  | 0.114 | 0.635 | -0.170 | 0.279 |
| Moral pride – prosocial context | .157 | 0.121  | 0.072 | 0.093 | -0.020 | 0.263 |
| $R^2$                           | .132 |        |       |       |        |       |

*Note.* CI = confidence interval; LL = lower limit, UL = upper limit; HO = harm omission.

# Figure 1

Drawings Presented Alongside Moral Pride Vignette (Prosocial Context)

[Frame 1][Frame 2][Frame 3]Japan (girl version)Image: Image: Image

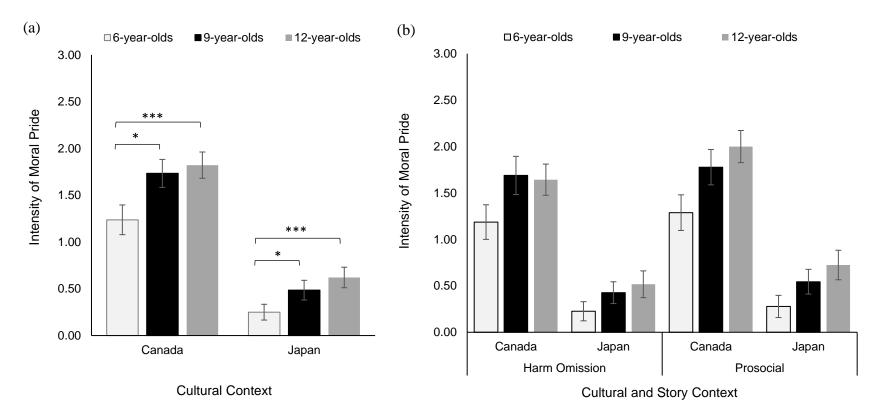
Canada/Italy (girl version, skin-tone variation)



*Note.* The protagonist of each story was introduced in Frame 1. Frame 2 posed the dilemma (i.e., choosing a selfish act or a prosocial act). Frame 3 revealed the moral action (i.e., choosing the prosocial act). Drawings were in the first-person perspective to help children immerse themselves in the story and to relieve any difficulties that may arise in third-person attributions. Drawings were gender- and skin-tone matched to the child. Drawings were adapted from the Social-Emotional Responding Task (Malti, 2017). See the online article for the color version of this figure.

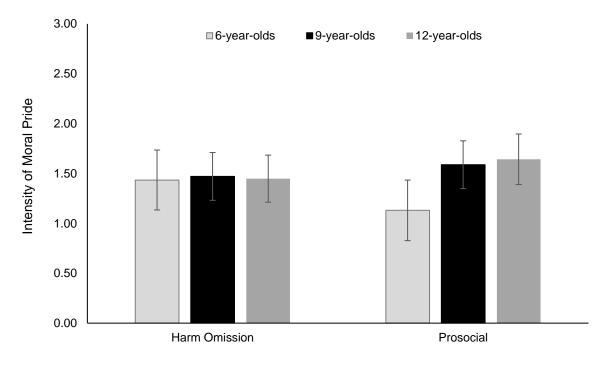
# Figure 2

Moral Pride by Age Group by Cultural Context (Canada and Japan) and Age Group by Story Context



*Note.* (a) Moral pride as an aggregate score. Canadian children reported stronger feelings of moral pride compared to Japanese children (p < .001), (b) moral pride by story context. Children reported stronger feelings of moral pride in the prosocial context compared to the harm omission context (p < .05). \* p < .05 \*\*\* p < .001

# Figure 3



Intensity of Moral Pride by Age Group in the Italian Subsample

Story Context