Special Issue: Cooperation and Social Policy:
Integrating Evidence into Practice - Part 2

REPLY

Context matters in myriad ways: a reply to 'Building a cooperative child: evidence and lessons cross–culturally' by Tanya Broesch and Erin Robbins

Marlene Försterling, marlene.forsterling@psy.ox.ac.uk
Robert Hepach, robert.hepach@psy.ox.ac.uk
University of Oxford, UK

Joshua Rottman, jrottman@fandm.edu
Franklin & Marshall College, USA

Introduction

Developmental psychology, and in particular the study of sociomoral development, is becoming a research area of great significance. Research across a diversity of sub-disciplines, including social neuroscience (Grossmann et al, 2018) and comparative psychology (Melis and Warneken, 2016), has established the relevance of the so-called 'early years' for children's developing prosociality. Tremendous progress has been made in designing experimental studies that mirror real-life problems to elucidate the underlying mechanisms of cooperation and, more broadly, of morality. Researchers are continuously evolving their methods to include the study of very young children's helping, collaboration and sharing, both in cross-sectional and in longitudinal research designs. Broesch and Robbins (2023) have done a remarkable job surveying a wide swathe of knowledge and bringing it to bear in ways that could positively inform social policy. We applaud their plea for more research with non-Western samples and, particularly, with indigenous societies. Indeed, the majority of developmental psychology work is still based on highly biased samples of the human population (see

Nielsen et al, 2017). The resultant biased perspective may be especially pronounced in textbooks, which are often a first resource for practitioners and policymakers. It is therefore invaluable to extend the study of social cognition and motivation to be more inclusive of cultures that are currently under-represented in developmental research.

Two conceptual fault lines

In addition to echoing our colleagues' call for more inclusive research, we want to offer some critical reflections to further highlight the potential of developmental research for policymakers. When moving from basic research to implementing policy, we believe that it is important to consider two conceptual 'fault lines' that often separate research on children's social development (see Hepach, 2023). The first involves a fundamental difference in study designs between experiments that investigate causal mechanisms (for example, much of the research on norm psychology reviewed by Broesch and Robbins [2023]) and more observational studies that examine individual differences (for example, research on attachment). For policymakers, this distinction is relevant because any intervention will inherently need to be tailored to precisely address both general underlying mechanisms that influence behaviour and the specific characteristics of the target individuals. In other words, any intervention will only be as good as our understanding of how a (dys)functional phenomenon comes about, as well as of the range of individual differences, because specific groups of children may respond differently to one and the same intervention, or to a change in policy.

The second fault line relates to the social environment in which a child's behaviour is being studied or intervened in. Broesch and Robbins (2023) specifically highlight cultural contexts, and we agree that this increased sensitivity is indeed critical for policymaking. However, we advocate for these insights and recommendations to be stretched even further in order to encompass additional contexts. In particular, while we think that Broesch and Robbins are exactly on target when it comes to lending greater attention to cultural and historical contexts, we suggest that more scrutiny should be given to more local contexts as well. Furthermore, studies often report on children's prosocial behaviour either in their home context (towards parents and siblings) or in a lab-based context (towards adult strangers and peers) but seldom both (for reviews, see Dahl, 2018; Warneken, 2015; Hughes et al, 2018; Köster and Kärtner, 2019). That is to say, we know too little about how children's cooperation at home relates to their cooperation outside the home, such as in kindergartens or nurseries (see Schmerse and Hepach, 2021).

Contexts can moderate and even reverse the effects of interventions

Broesch and Robbins (2023) demonstrate how sociocultural contexts can influence perspective taking, self-expansion, attachment and social norms. As we have noted, however, other contextual factors are also critical to take into account, and this need is particularly acute for policymakers. If specific social dynamics are not attended to, interventions are likely to fail, fall short of their intended effect or even produce counterproductive effects. We illustrate some of these concerns in the following.

We agree that fostering perspective taking is likely to promote cooperation in many instances. However, we caution that this is not a panacea and can sometimes

backfire (see Stephan and Finlay, 1999; Batson and Ahmad, 2009). In situations where animosity is present, taking another person's perspective can intensify competition (Pierce et al, 2013), so encouraging perspective taking may not be the best first step to ameliorate existing conflicts. The expansion of children's self-concepts must also be done with great care. Inclusion of others in one's self-concept will extend care towards these others but not to individuals who are not considered to be part of the superordinate group to which one belongs. Furthermore, strong identification with particular groups can lead to upticks in violent tendencies towards outgroups (Atran and Ginges, 2015). Similarly, fostering norm internalisation is only likely to promote cooperation insofar as social norms are aligned with cooperative activities (see Zaneva et al, 2023). Children are strategic in selecting the norms to which they adhere, and they are more likely to conform to selfish norms than to prosocial norms (Blake et al, 2016). While reputation may often promote reciprocity (see Rand et al, 2014), focusing on instrumental reasons for cooperation will lead to defection when rewards are absent or not aligned with prosociality. Thus, we caution against emphasising extrinsic rewards for cooperation at the potential cost of intrinsic motivation.

Intrinsic motivation and emotions

The relevance of considering intrinsic motivation – that is, experiencing a behaviour as rewarding in and of itself (see Deci and Ryan, 2000) – as a crucial construct for explaining cooperation is substantiated by its early emergence in ontogeny; Grueneisen and Warneken (2022) reviewed evidence suggesting that strategic concerns, under which 'reputational concerns' and 'social norms' (see Broesch and Robbins, 2023) can be subsumed, emerge at around five years of age. The theoretical considerations (Tomasello, 2017; Vaish and Hepach, 2020) and empirical findings that are outlined later suggest that children's early prosocial behaviour is, to some extent, explained by intrinsic motivations. We suggest that this intrinsic tendency should also be leveraged to encourage prosocial behaviour from early on in development.

Children display prosocial behaviour, such as helping, sharing and comforting, from their second year of life (see, for example, Svetlova et al, 2010). This early emergence of prosocial behaviour may be facilitated by prosocial emotions: infants display the first signs of empathy, conceptualised as 'the ability to feel concern and care for others' (Davidov et al, 2013: 126), already in their first year of life. Infants as young as eight months respond to maternal and peer distress with empathy, as assessed via human coders (Roth-Hanania et al, 2011). Additional research shows that empathy relates positively to prosocial behaviour in children (Knafo et al, 2008; Williams et al, 2014; Grossmann et al, 2018; for a review, see also Vaish, 2016). Moreover, toddlers and preschool children experience positive emotions in contexts of helping (Aknin et al, 2012, 2018; Hepach et al, 2017; Hepach and Tomasello, 2020). These studies indicate positive affect in situations where others are helped and even find negative affect when help is not provided (Gerdemann et al, 2022a, 2022b). Aknin et al (2018) theorise that positive emotions, specifically, may help maintain a 'positive feedback loop', in which prosocial behaviour elicits positive emotions and positive emotions, in turn, reinforce prosocial behaviour. This reasoning is also consistent with studies in adults on elevation (the 'high feeling' evoked by experiencing or watching a morally praiseworthy act) and kindness (generous, prosocial behaviour) showing that a positive mood increases the likelihood of prosocial behaviour (Algoe

and Haidt, 2009; Curry et al, 2018; Rowland and Curry, 2019). Likewise, Hammond and Drummond (2019) argue that in naturalistic studies, young children display most prosocial behaviour in positive contexts.

How can these theoretical notions and empirical results inform policymakers and educators? In line with the importance of emotions for prosocial behaviour, Spinrad and Gal (2018) reviewed evidence that fostering emotional competence increases children's prosociality. For example, the American Psychological Association published recommendations for caregivers on how to help children to understand and manage emotions (see Weir, 2023). They give the advice to 'Start early', 'Connect', 'Talk and teach', 'Model good behaviour', 'Stay calm', 'Plan options', 'Act it out', 'Punish less, praise more', 'Be a team', 'Check your expectations' and 'Take the long view'. Furthermore, fostering an atmosphere of more general kindness in social settings like schools or clubs could facilitate prosocial behaviour, as children will tend to experience more positive emotions in these contexts. To this end, teachers could utilise classical learning mechanisms, such as modelling kindness or scaffolding prosocial behaviour in peers (Dahl et al, 2022).

Conclusions and additional recommendations

In this commentary, we have aimed to contribute to the discussion of how developmental research, especially on cooperation and prosocial behaviour, can positively inform social policy. We have stressed that translating basic research into interventions requires that specifics of the research, such as (1) the study design, (2) the cultural context in which research was conducted and (3) other context variables, are carefully considered. Further, we have focused on amplifying the role of prosocial emotions in the early ontogeny of prosocial behaviour as one further potential avenue for interventions. Specifically, we have addressed the importance of creating a positive environment, scaffolding emotion regulation to support children in maintaining their prosocial tendencies and developing a functional behavioural repertoire.

In sum, while we concur with Broesch and Robbins (2023) that the systematic study of cultural influences is a critical step for identifying the variables that inform how cooperation develops, we wish to underscore that many other contextual factors are critical as well. In addition, it is important to emphasise that there is often a diverse set of solutions to any given cooperative problem. For example, while understanding the self as 'one among many animals' (Broesch and Robbins, 2023: 422; see also Uenal et al, 2022), rather than standing in a dominant relation to non–human animals, is likely to be sufficient for extending moral concern to animals and their ecosystems, it may not be necessary. Children are much less speciesist than adults (Wilks et al, 2021; McGuire et al, 2023), so perhaps the relevant interventions may not always need to rely on instilling greater concern for animals. Rather, they could focus on ensuring that moral concerns for animals are not lost as children develop into adolescents and young adults. By having a broad set of tools that could be applied to solving different problems, we will be better equipped to implement the best policies given particular cultural contexts.

Finally, it should be noted that sociocultural contexts should be carefully assessed to determine whether cooperation is indeed the most pressing goal. Although promoting cooperation has many benefits, achieving social harmony can sometimes come at the cost of social justice (see Saguy, 2018). Understanding local social dynamics is critical if policies are to provide overall benefits.

Before effective interventions can be designed, more research is needed to better map out the relation between children's helping towards parents and their cooperation with peers. The study of motivations may be of particular relevance to the extent that educators may seek not only to increase cooperation but also to change the underlying motivation to cooperate (for example, to make it more rewarding). While developmental psychology is increasingly becoming well positioned to inform policymakers, the construction of bridges from basic science to the implementation of interventions must be approached with great care, and different bridges will need to be built in differing milieus.

Funding

Conflict of interest
The authors declare that there is no conflict of interest.

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