

Cultural Diversity as a Window into the Cognitive Architecture of Morality

Duration: 33 months

Start Date: September 1st, 2023

Funding Area: Character Virtue Development

Department: Character Virtue Development

Executive Summary (max 1300 characters including spaces)

Recent research in moral psychology has embraced a cross-cultural perspective. Which earlier findings from mostly Western cultures will extend to other cultures? And why do some extend but others not? Answering these questions makes it possible to test theories about the cognitive architecture that underpins *moral responses* (judgments, feelings, and behaviours). Building on the insight that both *fast* and *slow* processes can guide moral responses, much of this research has used cross-cultural comparisons to test the influential dual process theory. But, as standardly formulated, the dual process theory itself is based upon intuitions about morality derived from the Western philosophical tradition. We believe that a cross-cultural perspective presents a hitherto missed opportunity to reconsider the intuitions behind the dual process theory as standardly formulated. We propose to develop—and test—a more informed theory of the cognitive architecture underpinning moral responses. To this end, we will review and synthesise theoretical and empirical research conducted within and across cultures on the dual process theory; catalogue the cultural factors thought to explain differences in moral responses; generate predictions about how fast or slow moral processes interact with culture; and test these predictions through 4 studies using qualitative and quantitative methods with participants from 6 regions.

Project Description (max 4000 characters including spaces)

If our aim is to understand cultural diversity in morality, there are theoretical and empirical reasons to hesitate before fully adopting the dominant dual process theory as our starting point. First, the moral systems at the basis of this theory (deontology and utilitarianism) are the products of Western philosophical tradition and do not reflect insights or values from other cultures. In addition, the dominant idea that only slow processes are utilitarian conflicts with the idea from evolutionary theory that even cognitively simpler organisms (in whom fast cognitive processes would predominate) do act in accordance with utilitarian principles insofar as doing so enhances the fitness of their kin (Kurzban et al, 2012). Finally, empirical results have not provided clear evidence to

support the theory even within Western cultures—for example, Bago and De Neys (2019) did not find evidence to support the prediction that when given more time to reflect, people would be more likely to switch from deontological judgements than vice versa, and Rosas & Aguilar-Pardo (2020) found that time pressure increased utilitarian judgments.

Thus, rather than using cross-cultural data to test the currently predominant dual process theory, we believe that a more open-minded approach to cross-cultural comparisons has the potential to guide reformulation of the dual process theory. Our research plan is as follows:

Step 1: Review and synthesise research conducted within and across cultures on the dual process theory—in relation to moral cognition as well as number cognition and mindreading. This will enable us to formulate principles about what likely distinguishes fast from slow moral processes.

Step 2: Catalogue the cultural factors that have been hypothesized to explain differences in moral responses. In so doing we will draw on existing cross-cultural research including Moral Foundations Theory (Graham et al, 2019) as well as ethnographic sources (Heintz, 2009).

Step 3: Using mixed qualitative-quantitative methods, we will conduct 2 small-scale studies in 6 regions (urban and rural regions of Italy, Java and Sumatra) to establish which findings extend to other cultures. In Study 1, we will use existing moral dilemmas and first ask people to make a judgement quickly, then allow them to consider the scenario in greater detail and to ask for more information, and then to change their response if desired (following Bago & Neys, 2019). In Study 2, we will take the same approach to replicating cross-culturally another successful study which compares deliberative with fast responses between subjects (Rosas & Aguilar-Pardo, 2020 Study 3). For both studies, we conduct follow-up interviews with subsets of participants, posing open-ended questions (E.g. What other information would they want to have? What alternative actions or punishments would they consider appropriate? What are central examples of moral dilemmas from their own lives or those of others in the culture?).

Step 4: Using the results from Studies 1 and 2 (Step 3), we will propose a revised dual process theory of the cognitive and motivational architecture underpinning moral responses, which identifies key cultural parameters influencing moral responses, and illuminates how these factors modulate cognitive processes. We will then generate predictions about cross-cultural differences in fast and slow moral reasoning processes.

Step 5: To test these predictions we will carry out 2 studies using qualitative and quantitative methods with participants from 6 regions. These studies will involve paradigms we design to obtain a rich picture of the cross-cultural differences at various stages of moral cognition (eg, What information do participants consider relevant? At what stages of decision-making do they process this information?) We will use the results to evaluate and revise the theory.

Statement of Significance (max 1300 characters including spaces)

The cross-cultural perspective recently embraced by researchers in moral psychology promises to illuminate the positive aspects of human nature which support our abilities to respond ethically and to recognise ethical responses in others. These abilities are fundamental to any cooperative society. Our proposed contribution to this development is motivated by the observation that while

participants are increasingly drawn from diverse groups, the philosophical foundations of the theories used to interpret empirical findings are limited insofar as they come from a single tradition. Indeed, the dominant dual process theory used in cross-cultural research is founded on intuitions about morality derived from the Western philosophical tradition. In order to develop an informed theory of the cognitive architecture underpinning moral responses, a more open-minded approach to cultural diversity is needed: our aim is to meet this need.

Outputs (max 1300 characters including spaces)

- 3 journal articles: 2 reporting empirical findings pertaining to cultural differences in moral cognition; 1 major theoretical paper (targeting *Psychological Review* or *BBS*) presenting a review and cross-cultural approach to dual process theories of moral cognition.
- We will hold two intensive week-long workshops (one in each country), involving the project leaders and local collaborators, in order to discuss the interpretation of our findings, to adjust experimental designs in light of our findings.
- We will present findings at conferences in cognitive science and philosophy, and disseminate them on a dedicated project website as well as on Twitter.

Outcomes (max 1300 characters including spaces)

We will provide a principled, and cross-culturally informed, reformulation of dual process theory. This reformulated theory will give direction to future research on moral cognition. It will also enable us to understand systematic variance in *moral responses* (judgments, feelings, and behaviours) across cultures, and to illuminate how different forms or aspects of morality are cultivated and maintained in different cultural contexts.

We will develop and submit a proposal for funding for a larger project to systematically test the theory developed here in a broad range of cultural contexts.

We will cultivate our network of collaborators and institutions to enable us to advance cross-cultural research on moral responses.

By identifying constancies underlying individual and cultural differences, we will also make it possible to formulate and evaluate hypotheses about which components of moral cognition may have evolved through natural selection.

Capacity for Success (max 1300 characters including spaces)

The Philosophy Department at the University of Warwick will host the project. They provide an interdisciplinary setting in which economists, psychologists, and philosophers work together to

understand joint action, the nature of institutions and related issues. The primary investigator, Stephen Butterfill, has not previously led such a large interdisciplinary project but has an extensive track-record of interdisciplinary collaborations. The co-investigator John Michael has recently concluded a large-scale project on the sense of commitment funded by a prestigious Starting Grant from the European Research Council, and accordingly has the relevant experience leading a team of researchers working on this topic. In addition, the project will benefit from a network of long-term trusted collaborators in Milan (Sinigaglia) and Indonesia (**TBC). At each of these locations, the relevant collaborator has experience carrying out cross-cultural research and access to participants as well as research infrastructure.

Relation to Sir John Templeton's Donor Intent (max 1300 characters including spaces)

The research proposed here falls squarely within Sir John Templeton's mission to increase our understanding of human nature, and in particular positive aspects of human nature which support ethical abilities. The ability to think and act ethically, and to recognise ethical responses in others, is a foundational component of any human society. Further, Sir John Templeton was committed to transcending cultural as well as disciplinary barriers and fostering communication and synthesis among diverse viewpoints. The cross-cultural and interdisciplinary approach taken here is inspired by that commitment.

Resources

This section to be revised after help from Wendy/Debbie

Total: 174,432

Experiments and dissemination (£139,680).

Participant numbers are based on <50%

Sample sizes will be determined based on effect sizes observed in the pilot studies and in the published studies on which they are based.

1. Research assistants will be employed at local universities to assist in: preparation of materials including translation; recruitment of participants; testing; and follow-up interviews. We estimate that allowing 400 hours (~10 weeks) plus travel and equipment for each of the six regions region would cost an average of £9,000 per region (**£54,000**)
2. Smaller-scale studies will include 50 participants in each of 6 regions (600 participants). Payment to participants plus recruitment* costs will average £8 per participant (£2,400 per pilot; 4 studies: **£9,600**).
3. Follow-up small group interviews with selected participants (12 per region, 72 participants) will be done by local research assistants in each region. £10 per participant (£720 per pilot; 4 pilot studies: **£2,880**).

4. Each larger-scale study will include 500 participants in each of 6 regions (6000 participants). We estimate that participant costs (payments plus recruitment*) will average £8 per participant per study (£24,000 per study; 2 studies: **£48,000**).
5. After each study, follow-up small group interviews with selected participants (60 per region, 360 participants) will be done by local research assistants in each region. £10 per participant (£3600 per study; 2 studies: **£7200**).
6. 1 week-long workshop in the UK (**£11,000**) and 1 in Indonesia (**£7,000**) involving the project leaders as well as experts from the UK, Indonesia and other countries in both locations.

Other Travel expenses (**£8,000**).

Publication costs (**£4,000**)

Overheads (15%): (**£22,752**)

*We estimate that participant costs will be much greater in rural than urban regions and will require research assistants to quite travel widely.