Is it good to cooperate? | Oliver Scott Curry | oliver.curry@anthro.ox.ac.uk | May 2016

| Fable S1: An overview of previous empirical cross-cultural (N>2) research on morality | | | | |
|---|--|--|--|---|
| Reference | Question | Method / DV | Sample | Answer |
| The Origin and Development of the Moral Ideas (Westermarck, 1906) | "Why do the moral ideas in general differ so greatly? And, on the other hand, why is there in many cases such a wide agreement?" | "the survey of an unusually rich and varied field of research psychological, ethnographical, historical, juridical, theological" | "mankind at large" | Evolved moral emotions and similarities of human nature make prohibition of homicide & theft, and approval of charity, generosity, mutual aid & honesty, universal. Differences arise due to "external circumstances", extended circles, reflection on motives & consequences, and supernatural beliefs. |
| Traits Inculcated in Childhood: Cross-Cultural Codes 5 (Barry III, Josephson, Lauer, & Marshall, 1976) | To what are traits (including fortitude, heroism, excellence, industry, obedience, generosity, trust and honesty) inculcated in children? | Analysis of the Standard Cross Cultural Sample. | 182 societies. | 'Somewhat' to 'moderately strongly' in the majority of societies, with some sex differences. |
| Comparative Deviance: Perception and law in six cultures (Newman, 1976) | Do cultures differ in their disapproval of specific crimes? | Anti-social offences rated for degree of seriousness / punishment. | Samples from six countries (India, Indonesia, Iran, Italy, United States, & Yugoslavia) | A "general consensus across all countries as to the extent that all acts should be tolerated", "the amount of official punishment appropriate", and relative rankings. |
| Political Decision Making and Conflict: Additional Cross- Cultural Codes and Scales (Ross, 1983) | What is the level of loyalty towards local community (and wider society)? | Analysis of the Standard Cross Cultural Sample. | 83 (84) societies | Moderate' to 'especially high' in 77/83 (and 60/84) societies. |

| Table S1: An overview of previous empirical c | cross-cultural (N>2) research on morality |
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| Reference | Question | Method / DV | Sample | Answer |
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| A Review of Cross- Cultural Studies on Moral Judgment Development Using the Defining Issues Test (Moon, 1986) | Do cultures differ by Kohlberg's 'moral stages'? | Review of cross- cultural studies using Defining Issues Test | 6 comparisons of Western versus non-Western cultures; Ns≈28 | ~10% difference in P-scores. |
| An evolutionary analysis of rules regulating human inbreeding and marriage (Thornhill, 1991) | What is the cross- cultural prevalence of incest rules, and why do they vary so much? | Coding prohibitions against incest, inbreeding, intermarriage from HRAF & SCCS ethnographies. | 129 societies | Incest explicitly prohibited in 33/129 (26%) societies. Inbreeding & intermarriage prohibitions reflect variation in patrilocality & paternity confidence, lineage solidarity & inheritance, stratification & concentration of wealth. |
| "Blood Feuds": Cross-Cultural Variations in Kin Group Vengeance (Ericksen & Horton, 1992) | Is kin group vengeance considered legitimate? | Analysis of the Standard Cross Cultural Sample. | 168 societies. | Legitimate in 90 (and a moral imperative in 38) societies. |
| Universals in the content and structure of values: Theory and empirical tests in 20 countries (Schwartz, 1992) | To what extent is the content, structure and priority of values cross-culturally universal? | Ratings (-1-7) of 56 values (11 types) subject to Smallest Space Analysis. | 40 samples (Ns≈200) (of students and teachers) in 20 countries. | Conformity, Tradition, Benevolence and Universalism "close to universals". 'Value priorities': "tradition, conformity, and benevolencemor e important in communal societiesself- direction, stimulation, and universalismmor e important in contractual societies." |

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| "Is it good to cooperate? Testing the theory of morality-as-cooperation in 60 societies." Current | Anthropology $60(1)$. DOI: 10 |

| Reference | Question | Method / DV | Sample | Answer |
|--|--|---|--|--|
| CONAN: An Electronic Code- Text Data-Base for Cross-Cultural Studies (Lang, 1998) | What is the level of loyalty towards ethnic group? | Analysis of the Standard Cross Cultural Sample. | 84 societies. | 'Middle' to 'high' in 45/86 societies. |
| 'Economic Man' in Cross-cultural Perspective: Behavioral experiments in 15 small-scale societies (Henrich et al., 2005) | Is fairness (and trust) a human universal, and / or influenced by social environment? | Ultimatum (and public goods) games. | 15 (6) small scale societies on four continents. | Fairness (and trust) exhibited in all societies; variation related to degree of market integration, importance of cooperation, and patterns of everyday life. |
| Shared Virtue: The Convergence of Valued Human Strengths Across Culture and History (Dahlsgaard, Peterson, & Seligman, 2005) | Are there any ubiquitous / widely valued virtues? | Selective literature review | Ancient texts from eight traditions (Confucianism, Taoism, Buddhism, Hinduism, Athenian philosophy, Christianity, Judaism, Islam) | Six recurrent virtues: courage, justice, humanity, temperance, wisdom, and transcendence. |
| Families Across Cultures: A 30- Nation Psychological Study (Georgas, Berry, Vijver, Kagitçibasi, & Poortinga, 2006) | Do people feel a moral obligation to their kin? | Family Values Scale (self-report questionnaire). | 30 countries. | Yes, with some variation across countries (η ² =0.29) |
| Standard Cross- Cultural Sample (Murdock & White, 2006) | What are the norms regarding taking revenge? | Analysis of the Standard Cross Cultural Sample. | 80 societies. | Prescribed in 48/80 societies. |
| Character strengths in fifty- four nations and the fifty US states (Park, Peterson, & Seligman, 2006) | What virtues do people ascribe to themselves? | Values in Action Inventory of Strengths (self- report questionnaire). | 54 nations. | "People everywhere see themselves as possessing the same interpersonal strengths [and] lacking the same strengths of temperance." |

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| A Dissociation Between Moral Judgments and Justifications (Hauser, Cushman, Young, Kang-Xing Jin, & Mikhail, 2007) | Do different populations observe the principle of double effect? | Internet-based trolley problems contrasting necessary / incidental harm. | Samples from Australia, Canada, US and UK | No significance difference between populations. |
| Purposive Social Selection and the Evolution of Human Altruism (Boehm, 2008) | Which behaviours are (dis)approved of? | Kin altruism, cheating, stealing and other social preferences and sanctions. | 10 societies (including 4 Inuit societies). | Kin altruism positive in 10 societies; cheating negative in 5 societies, stealing negative in 10. |
| Mapping the Moral Domain (Graham et al., 2011) | Do cultures differ on five moral foundations? | Moral Foundations Questionnaire (Harm/Care, Fairness/ Reciprocity, Ingroup/Loyalty, Authority/Respect, and Purity/ Sanctity) | Eastern cultures (South Asia, East Asia, and Southeast Asia; $n = 2,258$) & Western cultures (United States, United Kingdom, Canada, and Western Europe; $n = 104,893$). | Minuscule differences between East and West. Eastern participants scored higher on all measures; Ingroup (d=0.08), and Purity (d = 0.06) and Harm, Fairness, and Authority (ds < 0.04). |
| A Cross-Cultural Study of Noblesse Oblige in Economic Decision-Making (Fiddick, Cummins, Janicki, Lee, & Erlich, 2013) | Is noblesse oblige a cross-cultural norm? | Self-report responses to cheating, in vignettes, as boss or employee. | Samples (Ns≈54) from: Australia, Canada, Germany, Japan, Singapore, UK, USA. | 'Bosses' "more willing to continue the arrangement to feel they had been treated fairly [and to feel] less animosity toward their cheating partners, and believed they got the better deal". No difference between countries |
| What predicts religiosity? A multinational analysis of reproductive and cooperative morals (Weeden & Kurzban, 2013) | Are there differences between the moral values of different countries / regions? (A re- analysis of World Values Survey data.) | Questionnaire items rating the justifiability of cooperative (eg lying) and reproductive (eg homosexuality) morals. | ~90 countries / ~10 regions | Little variation between countries & regions on cooperative morals (R ² s=0.09, 0.02); more on reproductive morals (0.22, 0.14). |

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Bibliography

- Barry III, H., Josephson, L., Lauer, E., & Marshall, C. (1976). Traits Inculcated in Childhood: Cross-Cultural Codes 5. *Ethnology*, 15(1), 83-106. doi: 10.2307/3773082
- Boehm, C. (2008). Purposive Social Selection and the Evolution of Human Altruism. *Cross-Cultural Research, 42*, 319-352. doi: 10.1177/1069397108320422
- Dahlsgaard, K., Peterson, C., & Seligman, M. E. P. (2005). Shared Virtue: The Convergence of Valued Human Strengths Across Culture and History. *Review of General Psychology*, 9(3), 203-213. doi: 10.1037/1089-2680.9.3.203
- Ericksen, K. P., & Horton, H. (1992). "Blood Feuds": Cross-Cultural Variations in Kin Group Vengeance. *Cross-Cultural Research*, *26*(1-4), 57-85. doi: 10.1177/106939719202600103
- Fiddick, L., Cummins, D., Janicki, M., Lee, S., & Erlich, N. (2013). A Cross-Cultural Study of Noblesse Oblige in Economic Decision-Making. *Human Nature*, 24(3), 318-335. doi: 10.1007/s12110-013-9169-9
- Georgas, J., Berry, J. W., Vijver, F. J. R. v. d., Kagitçibasi, Ç., & Poortinga, Y. H. (Eds.). (2006). *Families Across Cultures: A 30-Nation Psychological Study*: Cambridge University Press.
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the Moral Domain. *Journal of Personality and Social Psychology*, 101(2), 366-385. doi: Doi 10.1037/ A0021847
- Hauser, M. D., Cushman, F., Young, L., Kang-Xing Jin, R., & Mikhail, J. (2007). A Dissociation Between Moral Judgments and Justifications. *Mind & Language*, 22(1), 1-21. doi: 10.1111/j. 1468-0017.2006.00297.x
- Henrich, J., Boyd, R., Bowles, S., Camerer, C., Fehr, E., Gintis, H., ... Tracer, D. (2005).
 'Economic Man' in Cross-cultural Perspective: Behavioral experiments in 15 small-scale societies. *Behavioral and Brain Sciences*, 28(6), 795–855.
- Lang, H. (1998). CONAN: An Electronic Code-Text Data-Base for Cross-Cultural Studies. World Cultures: Journal of Comparative and Cross-Cultural Research, 9(2), 13-56.
- Moon, Y.-L. (1986). A Review of Cross-Cultural Studies on Moral Judgment Development Using the Defining Issues Test. Cross-Cultural Research, 20(1-4), 147-177. doi: 10.1177/106939718602000107
- Murdock, G. P., & White, D. R. (2006). Standard Cross-Cultural Sample.
- Newman, G. (1976). Comparative Deviance: Perception and law in six cultures.
- Park, N., Peterson, C., & Seligman, M. E. P. (2006). Character strengths in fifty-four nations and the fifty US states. *The Journal of Positive Psychology*, 1(3), 118-129. doi: 10.1080/17439760600619567
- Ross, M. H. (1983). Political Decision Making and Conflict: Additional Cross-Cultural Codes and Scales. *Ethnology*, *22*(2), 169-192. doi: 10.2307/3773578
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1-65). New York: Academic Press.
- Thornhill, N. W. (1991). An evolutionary analysis of rules regulating human inbreeding and marriage. *Behavioral and Brain Sciences*, *14*(02), 247-261. doi: doi:10.1017/S0140525X00066449
- Weeden, J., & Kurzban, R. (2013). What predicts religiosity? A multinational analysis of reproductive and cooperative morals. *Evolution and Human Behavior*, 34(6), 440-445.
- Westermarck, E. A. (1906). The Origin and Development of the Moral Ideas. London: Macmillan.

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Table S2: Search Syntax

| DOMAIN | SUBJECT CODE | EHRAF SEARCH SYNTAX |
|------------|---|---|
| Kinship | 183' Norms 476' Mutual Aid 602' Kin Relationships 610' Kin Groups | (Text = (xiao OR filial OR piety OR kinship OR obligations OR kin OR family OR nepotism OR duty OR loyalty))) OR ((Subjects = (Any Subject)) AND (Text = (ethic* OR moral* OR unethical OR immoral OR duty OR fair OR loyal OR oblig* OR permi* OR praise OR scrup* OR virtu* OR blame OR vice*) |
| Mutualism | 183' Norms 476' Mutual Aid 621' Community Structure | (Text = (ethic* OR moral* OR unethic* OR immoral OR duty OR fair OR loyal* OR oblig* OR permi* OR praise* OR scrup* OR virtu* OR blame* OR vice)) AND ((Subjects = (Any Subject)) AND (Text = (loyalty OR friendship OR solidarity OR betray* OR "defend group" OR conform*)))) |
| Exchange | 183' Norms 431' Gift Giving 476' Mutual Aid 621' Community Structure | (Text = (ethic* OR moral* OR unethic* OR immoral OR duty OR fair OR loyal* OR oblig* OR permi* OR praise* OR scrup* OR virtu* OR blame* OR vice))) AND ((Subjects = (Any Subject)) AND (Text = (reciproc* OR "return favor" OR "return favour" OR "pay debts" OR aveng* OR revenge OR venge* OR "keep promises" OR "in return" OR owe OR retribution OR trust* OR untrust* OR "make amends" OR "express gratitude" OR repent* OR cheat) |
| Hawk | 152' Drives and Emotions183' Norms476' Mutual Aid727' Aftermath of Combat | (Text = (ethic* OR moral* OR unethic* OR immoral OR duty OR fair OR loyal* OR oblig* OR permi* OR praise* OR scrup* OR virtu* OR blame* OR vice))) AND ((Subjects = (Any Subject)) AND (Text = (brave* OR courage* OR hero* OR coward* OR fortitude OR shame OR digni* OR gallant* OR guabaz OR honour* OR honor* OR valour OR pawr OR "male virtue") |
| Dove | 183' Norms 476' Mutual Aid 571' Social Relationships and Groups | (Text = (ethic* OR moral* OR unethic* OR immoral OR duty OR fair OR loyal* OR oblig* OR permi* OR praise* OR scrup* OR virtu* OR blame* OR vice))) AND ((Subjects = (Any Subject)) AND (Text = (defer* OR respect OR obe* OR charit* OR chival* OR fealty OR gallant* OR noblesse OR oblige) |
| Division | 183' Norms 261' Gratification and Control of Hunger 476' Mutual Aid 571' Social Relationships and Groups | (Text = (ethic* OR moral* OR unethic* OR immoral OR duty OR fair OR loyal* OR oblig* OR permi* OR praise* OR scrup* OR virtu* OR blame* OR vice)) AND ((Subjects = (Any Subject)) AND (Text = (fair* OR unfair* OR "equal shares" OR "divide equally" OR compromise) |
| Possession | 183' Norms 421' Property System 476' Mutual Aid 685' Property Offenses | (Text = (ethic* OR moral* OR unethic* OR immoral OR duty OR fair OR loyal* OR oblig* OR permi* OR praise* OR scrup* OR virtu* OR blame* OR vice))) AND ((Subjects = (Any Subject)) AND (Text = (propert* OR possession OR belong OR thiev* OR steal* OR thief OR own) |