Sphere and cultural-specific distinctions of moral and non-moral values

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Mapping the moral domain to identify "core values" that represent moral concerns has become an important focus in moral psychology. An essential question is which values are considered as "moral" or "non-moral" across social spheres and cultures. We examined the importance as well as the perceived degree of morality of different values in two professional spheres (medicine, business & finance). Based on literature and expert interviews, we first identified 14 values that are of particular importance for either domain; the spheres overlap in 8 values. In two online surveys, samples of Swiss undergraduates and professionals (medicine n = 317, business & finance n = 247) were asked to rate each value along four dimensions (moral – non-moral, self-oriented – community-oriented, cooperative – competitive, and consequentialist – principle-focused. We found that the first three dimensions were highly correlated across spheres; they describe the distinction between "moral" (universal, community-oriented, and cooperative). Clustering the values using various methods and similarity measures revealed for both spheres that the values formed three basic classes: "moral" values (I), "non-moral" values (II), and "bridge values" (III), characterized by the fact that class-I values were never in the same cluster with class-II values, whereas class-III values could be grouped together with values of the other two classes depending on grouping method. Of particular interest is that none of the four basic principles of biomedical ethics (autonomy, non-maleficence, benefience and justice) fell into the "moral" class, which conflicts with the claim that they are part of the common morality. We are currently expanding our analysis for a much larger set of 78 value groups that include 460 value terms for identifying differences in two cultural contexts (Switzerland, USA Midwest).

Introduction

Several attempts exist for mapping the moral space, i.e. grouping concepts representing moral and non-moral values. Most prominent examples include Shalom Schwartz' universal human values and Jon Haidt's moral foundations theory. One aim of such approaches is to identify the elements of a "common morality", which is understood as a moral system that is applicable to all persons in all places, and we rightly judge all human conduct by its standards. This raises the question of the defining features of morality in order to identify whether and to what extend a specific value is part of the moral domain.

Both philosophy as well as cognitive approaches in moral psychology, have emphasized the feature of universality of common morality. In addition, research referring to the evolutionary conditions of the human species - i.e. the uniquely derived lifestyle of human foragers, which requires generosity and sharing due to extreme mutual interdependence - points to two further dimensions of common morality: community-orientation and cooperation. The aim of the present research is twofold. First, we wish to examine empirically the extent to which various values are judged as moral and whether such judgments are characterized by the features universality, communion and cooperation orientation. Second, we wish to test whether the judgments generalize across different social domains.

Methods

Value identification within two domains: We conducted literature reviews, interviews with experts, and a small survey among various professionals in Switzerland to identify a) the relevant values within the respective domain, and b) typical behavioral manifestations of those values. We identified 14 values (not necessarily "genuinely moral") considered to be important in the respective domain. The values identified in this way in medicine were: autonomy, care, cost-effectiveness, feasibility, honesty, integrity, justice, loyalty, nonmaleficence, performance, professionalism, reputation, respect, and responsibility. The 14 business & finance values were: engagement, competition, compliance, fairness, integrity, loyalty, nonmaleficence, performance, professionalism, reports, and transparency. As expected, the values of both domains overlapped only partly. 8 values were present in both domains, 2 had similar descriptions.

Morality dimensions: We assessed the participant's evaluation of the corresponding value along four dimensions on a 6-point Likert scale (see below): The "moral – non-moral" dimension was explicitly described as referring to universal principles and issues of right and wrong (MO-NMO). The "community-oriented – self-oriented" dimension referred to the social notion of morality (COM-SELF). The "cooperative – competitive" dimension was described as referring to collaborative or rivalry tendencies between human beings or institutions (COOP-COMP). Finally, we added the "principle-focused – consequentialist" dimension for including a reference to the classic deontological vs teleological distinction in ethical theory (PRI-CON).

MO-NMO: The value claims to be universally valid and its corresponding actions are judged as right or wrong. The value does not claim to be universally valid and corresponding actions are not judged as right or wrong. COM-SELF: The value refers to the goals of a community, common interest or the relation among individuals. / The value refers to the priority of personal goals, personal interests or the individual. COOP-COMP: The value refers to the collaboration, cooperation or communication between human beings or institutions. / The value refers to the competition or rivalry between human beings or institutions. PRI-CON: The value focuses on the legitimacy of the act itself when the value is used to valuate actions. / The value focuses to the evaluation of consequences of an action when the value is used to valuate actions.

Figures & Tables

	Medicine ($n_1 = 317$)		Business & Finance ($n_2 = 274$)	
Correlated dimensions	Correlation of	# of values with	Correlation of	# of values with
	aggregated data	significant(*)	aggregated data	significant(*)
		correlation		correlation
MO-NMO with COM-SELF	0.41***	10	0.53***	10
MO-NMO with COOP-COMP	0.58***	13	0.63***	14
COM-SELF with COOP-COMP	0.58***	14	0.68***	14
MO-NMO with PRI-CON	0.29***	7	0.35***	4
COM-SELF with PRI-CON	0.20***	5	0.31***	5
COOP-COMP with PRI-CON	0.24***	3	0.37***	6
Table 1: Pearson product-moment correlation among the four				
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dimensions: The dimensions MO-NMO, COM-SELF and COOP-COMP that characterize morality show a much higher correlation among themselves as compared to dimension PRI-CON across social spheres. *p<0.05, ***p<0.001



Figure 1: Count Matrix representing how often two values have been classified into the same group: the darker the entry, the more often two values have been grouped together (12 times maximally). Yellow entries indicate values that have never been classified together; a) count matrix for medicine, b) count matrix for business & finance. The color bars on the left side indicate the two grouping options (blue: class-I, green: class-II, red: class-III). <u>Value abbreviations: AUT=autonomy; CAR=care</u>,

CPT=competition, COM=compliance, CEF=cost-effectiveness, ENG=engagement, FAI=fairness, FEA=feasibility, HON=honesty, INT=integrity, JUS= justice, LOY=loyalty, NMA=nonmaleficence, PER=performance, PRO=professionalism, PFT=profitability, REP=reputation, RES= respect, RPS=responsibility,



Figure 2: Network representation of the count matrix in medicine. The size of the edge between two values represents how often these values have been grouped together. Value abbreviations: see caption figure 1.



matrix in business & finance (see caption figure 2 for details, see caption figure 1 for value abbreviations)

Methods (continued)

Survey: Two samples were collected with online surveys (317 participants from medicine, 27.4% with work experience; and 247 participants from business. 31.6% with work experience). Participants rated each value (randomly ordered) along the four dimensions using a 6-point Likert scale.

Value classification: We used two similarity metrics (Mann-Whitney and Kolmogorov-Smirnov) for each dimension MO-NMO, COM-SELF and COOP-COMP. We also used two classification methods for each dimension. In the first method, two values are considered to be in the same group, if the ratings along one dimension are not distinguishable for one of the two tests (i.e., ps > 0.05). In the second method, the p-values of the two tests are used to create a distance matrix that served as input for a clustering algorithm that required no predefined specifications on cluster number and size (sequencial superparamagnetic clustering).

Results

Correlational analysis: We found (Table 1) that the mean mutual correlations among dimensions MO-NMO, COM-SELF and COOP-COMP were 0.52 (medicine) and 0.61 (business), whereas the mean correlations among MO-NMO, COM-SELF, COOP-COMP and dimension PRI-CON were 0.25 and 0.34. The mean number of values with significant correlations among the first three dimensions in medicine and business was 12.3 and 12.7, while the mean number of values with significant correlations with the fourth dimension was 5.0 and 5.0. We thus conclude that participants tend to associate a "moral value" with the attributions: universally valid, an issue of right and wrong, community and cooperation. In contrast, a "non-moral value" was characterized by the features: non-universal, not an issue of right and wrong, but an issue of self-orientation and competition.

Value classification: We found two variants of forming three classes of values with the following features (Fig. 1): class-I (blue) and class-III (red) values were completely distinct; i.e. values from class I were never grouped together with values from class III or vice versa. In contrast, class-II (dark green) values tended to overlap with the other two classes, i.e. for some combination of dimension, similarity measure and classification method, a class-II value was grouped with a class-I value, and for some other combination, it was grouped with a class-III value. Taking the intersection of these two variants reveals for both social domains a "moral" and a "non-moral" core that is partially domain-overlapping and partially domain-specific (Fig. 2/ 3).

Conclusions

We found that the three dimensions intending to grasp the common morality correlated strongly across the social domains and we have identified some values that form a moral core within both domains – respect, loyalty and responsibility. These data are consistent with the notion of a common morality. But other values that are considered as important moral orientations from a theoretical perspective in either sphere (e.g. autonomy in medicine and transparency in business) were less morally "loaded" than expected, indicating context-sensitivity of the degree of morality of values with respect to social spheres. None of the four values related to the principles of biomedical ethics (autonomy, nonmaleficence, care, and justice) fall into the moral core. This finding support the suggestions by other scholars in bioethics that the principles of biomedical ethics serve primarily as instruments in deliberated justifications, but lack grounding in a universal "common morality".