Correlation matrices across six moral foundation detection methods (MFD, MFD2, eMFD, DDR, CCR, MoralBERT). Significance: * p < 0.05, ** p < 0.01, *** p < 0.001.

MFD

	Care (Virtue)	Fairness (Virtue)	Loyalty (Virtue)	Authority (Virtue)	Sanctity (Virtue)	Care (Vice)	Fairness (Vice)	Loyalty (Vice)	Authority (Vice)	Sanctity (Vice)
Care (Virtue)	1	0.1 **	−0.1 **	−0.1 ***	0	0.1 ***	0	0	0.1 ***	−0.1 **
Fairness (Virtue)	0.1 **	1	0.1 *	0.2 ***	0.1 ***	0.2 ***	0.3 ***	0	0	0
Loyalty (Virtue)	−0.1 **	0.1 *	1	0.2 ***	0.1 ***	0	0	0	−0.1 ***	0
Authority (Virtue)	−0.1 ***	0.2 ***	0.2 ***	1	0.2 ***	0.2 ***	0.1 ***	0.2 ***	0	0.1 ***
Sanctity (Virtue)	0	0.1 ***	0.1 ***	0.2 ***	1	0.1 ***	0.1 *	−0.1 *	0	0.1 ***
Care (Vice)	0.1 ***	0.2 ***	0	0.2 ***	0.1 ***	1	0.1 ***	0.1 ***	0.2 ***	0.1 ***
Fairness (Vice)	0	0.3 ***	0	0.1 ***	0.1 *	0.1 ***	1	0	0.1 ***	0.1 ***
Loyalty (Vice)	0	0	0	0.2 ***	−0.1 *	0.1 ***	0	1	0.1 ***	0
Authority (Vice)	0.1 ***	0	−0.1 ***	0	0	0.2 ***	0.1 ***	0.1 ***	1	0
Sanctity (Vice)	−0.1 **	0	0	0.1 ***	0.1 ***	0.1 ***	0.1 ***	0	0	1

MFD2

	Care (Virtue)	Fairness (Virtue)	Loyalty (Virtue)	Authority (Virtue)	Sanctity (Virtue)	Care (Vice)	Fairness (Vice)	Loyalty (Vice)	Authority (Vice)	Sanctity (Vice)
Care (Virtue)	1	−0.2 ***	−0.2 ***	−0.3 ***	0	0	−0.1 ***	−0.1 **	0 *	−0.1 **
Fairness (Virtue)	−0.2 ***	1	0.1 ***	0.3 ***	0.1 ***	0.1 ***	0.3 ***	0	0	0.1 ***
Loyalty (Virtue)	−0.2 ***	0.1 ***	1	0.3 ***	0	0.1 **	0	0	0	0.1 *
Authority (Virtue)	−0.3 ***	0.3 ***	0.3 ***	1	0.1 ***	0	0.1 ***	0.1 ***	0.1 *	0.2 ***
Sanctity (Virtue)	0	0.1 ***	0	0.1 ***	1	0.1 ***	0.1 ***	0.1 ***	0.1 **	0.2 ***
Care (Vice)	0	0.1 ***	0	0	0.1 ***	1	0.1 ***	0.1 **	0.1 ***	0.2 ***
Fairness (Vice)	−0.1 ***	0.3 ***	0.1 **	0.1 ***	0.1 ***	0.1 ***	1	0	0.1 **	0.1 ***
Loyalty (Vice)	−0.1 **	0	0	0.1 ***	0.1 **	0.1 **	0	1	0.1 ***	0
Authority (Vice)	0 *	0	0	0.1 *	0.1 **	0.1 ***	0.1 **	0.1 ***	1	0.1 ***
Sanctity (Vice)	−0.1 **	0.1 ***	0.1 *	0.2 ***	0.2 ***	0.2 ***	0.1 ***	0	0.1 ***	1

eMFD

	Care (Virtue)	Fairness (Virtue)	Loyalty (Virtue)	Authority (Virtue)	Sanctity (Virtue)	Care (Vice)	Fairness (Vice)	Loyalty (Vice)	Authority (Vice)	Sanctity (Vice)
Care (Virtue)	1	0.5 ***	0.5 ***	0.4 ***	0.5 ***	−0.3 ***	−0.3 ***	−0.3 ***	−0.3 ***	−0.2 ***
Fairness (Virtue)	0.5 ***	1	0.5 ***	0.5 ***	0.5 ***	−0.3 ***	−0.4 ***	−0.3 ***	−0.3 ***	−0.3 ***
Loyalty (Virtue)	0.5 ***	0.5 ***	1	0.5 ***	0.5 ***	−0.2 ***	−0.3 ***	−0.4 ***	−0.3 ***	−0.3 ***
Authority (Virtue)	0.4 ***	0.5 ***	0.5 ***	1	0.6 ***	−0.3 ***	−0.3 ***	−0.3 ***	−0.3 ***	−0.3 ***
Sanctity (Virtue)	0.5 ***	0.5 ***	0.5 ***	0.6 ***	1	−0.3 ***	−0.3 ***	−0.2 ***	−0.3 ***	−0.3 ***
Care (Vice)	−0.3 ***	−0.3 ***	−0.2 ***	−0.3 ***	−0.3 ***	1	0.6 ***	0.5 ***	0.5 ***	0.6 ***
Fairness (Vice)	−0.3 ***	−0.4 ***	−0.3 ***	−0.3 ***	−0.3 ***	0.6 ***	1	0.5 ***	0.6 ***	0.6 ***
Loyalty (Vice)	−0.3 ***	−0.3 ***	−0.4 ***	−0.3 ***	−0.2 ***	0.5 ***	0.5 ***	1	0.6 ***	0.5 ***
Authority (Vice)	−0.3 ***	−0.3 ***	−0.3 ***	−0.3 ***	−0.3 ***	0.5 ***	0.6 ***	0.6 ***	1	0.5 ***
Sanctity (Vice)	−0.2 ***	−0.3 ***	−0.3 ***	−0.3 ***	−0.3 ***	0.6 ***	0.6 ***	0.5 ***	0.5 ***	1

DDR

	Care (Virtue)	Fairness (Virtue)	Loyalty (Virtue)	Authority (Virtue)	Sanctity (Virtue)	Care (Vice)	Fairness (Vice)	Loyalty (Vice)	Authority (Vice)	Sanctity (Vice)
Care (Virtue)	1	0.6 ***	0.6 ***	0.6 ***	0.7 ***	0.6 ***	0.6 ***	0.4 ***	0.6 ***	0.5 ***
Fairness (Virtue)	0.6 ***	1	0.6 ***	0.7 ***	0.5 ***	0.4 ***	0.6 ***	0.4 ***	0.5 ***	0.5 ***
Loyalty (Virtue)	0.6 ***	0.6 ***	1	0.7 ***	0.6 ***	0.6 ***	0.7 ***	0.6 ***	0.7 ***	0.4 ***
Authority (Virtue)	0.6 ***	0.7 ***	0.7 ***	1	0.7 ***	0.6 ***	0.6 ***	0.5 ***	0.7 ***	0.7 ***
Sanctity (Virtue)	0.7 ***	0.5 ***	0.6 ***	0.7 ***	1	0.7 ***	0.6 ***	0.5 ***	0.6 ***	0.6 ***
Care (Vice)	0.6 ***	0.4 ***	0.6 ***	0.6 ***	0.7 ***	1	0.7 ***	0.7 ***	0.7 ***	0.5 ***
Fairness (Vice)	0.6 ***	0.6 ***	0.7 ***	0.6 ***	0.6 ***	0.7 ***	1	0.6 ***	0.7 ***	0.5 ***
Loyalty (Vice)	0.4 ***	0.4 ***	0.6 ***	0.5 ***	0.5 ***	0.7 ***	0.6 ***	1	0.8 ***	0.4 ***
Authority (Vice)	0.6 ***	0.5 ***	0.7 ***	0.7 ***	0.6 ***	0.7 ***	0.7 ***	0.8 ***	1	0.5 ***
Sanctity (Vice)	0.5 ***	0.5 ***	0.4 ***	0.7 ***	0.6 ***	0.5 ***	0.5 ***	0.4 ***	0.5 ***	1

CCR

	Care (Virtue)	Fairness (Virtue)	Loyalty (Virtue)	Authority (Virtue)	Sanctity (Virtue)	Care (Vice)	Fairness (Vice)	Loyalty (Vice)	Authority (Vice)	Sanctity (Vice)
Care (Virtue)	1	0.4 ***	0.4 ***	0.5 ***	0.8 ***	0.6 ***	0.5 ***	0.4 ***	0.5 ***	0.5 ***
Fairness (Virtue)	0.4 ***	1	0.5 ***	0.6 ***	0.4 ***	0.2 ***	0.2 ***	0.2 ***	0.3 ***	0.1 ***
Loyalty (Virtue)	0.4 ***	0.5 ***	1	0.6 ***	0.4 ***	0.2 ***	0.2 ***	0.5 ***	0.3 ***	0.2 ***
Authority (Virtue)	0.5 ***	0.6 ***	0.6 ***	1	0.5 ***	0.3 ***	0.2 ***	0.2 ***	0.4 ***	0.2 ***
Sanctity (Virtue)	0.8 ***	0.4 ***	0.4 ***	0.5 ***	1	0.6 ***	0.5 ***	0.3 ***	0.5 ***	0.5 ***
Care (Vice)	0.6 ***	0.2 ***	0.2 ***	0.3 ***	0.6 ***	1	0.6 ***	0.4 ***	0.7 ***	0.7 ***
Fairness (Vice)	0.5 ***	0.2 ***	0.2 ***	0.2 ***	0.5 ***	0.6 ***	1	0.4 ***	0.7 ***	0.5 ***
Loyalty (Vice)	0.4 ***	0.2 ***	0.5 ***	0.2 ***	0.3 ***	0.4 ***	0.4 ***	1	0.5 ***	0.4 ***
Authority (Vice)	0.5 ***	0.3 ***	0.3 ***	0.4 ***	0.5 ***	0.7 ***	0.7 ***	0.5 ***	1	0.6 ***
Sanctity (Vice)	0.5 ***	0.1 ***	0.2 ***	0.2 ***	0.5 ***	0.7 ***	0.5 ***	0.4 ***	0.6 ***	1

MoralBERT

	Care (Virtue)	Fairness (Virtue)	Loyalty (Virtue)	Authority (Virtue)	Sanctity (Virtue)	Care (Vice)	Fairness (Vice)	Loyalty (Vice)	Authority (Vice)	Sanctity (Vice)
Care (Virtue)	1	0.1 ***	0.1 ***	0.1 **	0	0.1 ***	−0.1 **	0.2 ***	−0.1 **	0
Fairness (Virtue)	0.1 ***	1	0.1 ***	0.1 ***	0	0.1 ***	0.3 ***	−0.1 ***	0	−0.1 ***
Loyalty (Virtue)	0.1 ***	0.1 ***	1	0	0	−0.1 **	−0.1 *	0.1 ***	−0.1 ***	−0.1 ***
Authority (Virtue)	0.1 **	0.1 ***	0	1	0	−0.1 **	0.2 ***	−0.1 ***	0.4 ***	−0.1 ***
Sanctity (Virtue)	0	0	0	0	1	0.1 ***	0.1 ***	0.1 ***	0.1 ***	0.2 ***
Care (Vice)	0.1 ***	0.1 ***	−0.1 **	−0.1 **	0.1 ***	1	0.3 ***	0.2 ***	0.2 ***	0.1 ***
Fairness (Vice)	−0.1 **	0.3 ***	−0.1 *	0.2 ***	0.1 ***	0.3 ***	1	0	0.3 ***	0
Loyalty (Vice)	0.2 ***	−0.1 ***	0.1 ***	−0.1 ***	0.1 ***	0.2 ***	0	1	0	0.1 **
Authority (Vice)	−0.1 **	0	−0.1 ***	0.4 ***	0.1 ***	0.2 ***	0.3 ***	0	1	0
Sanctity (Vice)	0	−0.1 ***	−0.1 ***	−0.1 ***	0.2 ***	0.1 ***	0	0.1 **	0	1

Correlation
1.0
0.5
0.0
−0.5
−1.0