SUPPLEMENTARY MATERIAL

A. Item analyses

Here we present an overview of our item-wise analyses. For each individual item the average score over participants was calculated and entered into the analysis.

Moral Decisions data

Table S1. Percent of utilitarian responding for each dilemma in Study1

	Cor	Conflict		onflict
	Low load	High load	Low load	High load
Plane	84	63	90	76
Trolley	86	86	93	97
Hospital	80	78	88	93
Cave	93	68	84	88
Average	87	74	89	88

ANOVA results:

Load F(1,6) = 3.769, p = .100, $\eta p2 = .386$

Conflict F(1,6) = 7.737, $p = .032 \, \eta p2$, = .563

Interaction F(1,6) = 1.923, p = .215, $\eta p2 = .243$

Simple effect Load on Conflict: Load F(1,6) = 4.628, p = .075, $\eta p2 = .435$

Table S2. Percent of utilitarian responding for each dilemma in Study 2

	Cor	Conflict		onflict
	Low load	High load	Low load	High load
Plane	58	67	80	87
Trolley	71	67	83	92
Hospital	57	82	91	100
Cave	58	74	85	83
Average	61	72	85	91

ANOVA results:

Load F(1,6) = 6.715, p = .041, $\eta p2 = .528$

Conflict F(1,6) = 42.363, p = .001, $\eta p2 = .876$

Interaction F(1,6) = 0.746, p = .421, $\eta p2 = .111$

Simple effect Load on Conflict: Load F(1,6) = 5.969, p = .050, $\eta p = .499$

Table S3. Percent of utilitarian responding for each dilemma in Study 3

	Cor	Conflict		onflict
	Low load	High load	Low load	High load
Plane	70	71	84	80
Trolley	69	68	90	84
Hospital	77	72	83	86

Cave	66	74	83	88
Average	71	73	85	85

ANOVA results:

Load F(1,6) = 0.004, p = .950, $\eta p2 = .001$

Conflict F(1,6) = 70.139, p < .001, $\eta p2 = .921$

Interaction F(1,6) = 0.108, p = .754, $\eta p2 = .018$

Simple effect Load on Conflict: Load F(1,6) = 0.078, p = .790, $\eta p = .013$

Conflict Detection

Table S4. Average confidence ratings (SD) per item in Study 1

		Low load			High load		
	Deontological	Utilitarian	No conflict	Deontological	Deontological Utilitarian		
	conflict	conflict	NO COMME	conflict	conflict	No conflict	
Plane	3.43 (2.23)	4.97 (1.64)	5.52 (1.32)	4.79 (1.67)	5.17 (1.71)	5.66 (1.00)	
Trolley	5.33 (1.00)	5.19 (1.57)	5.14 (1.76)	5.33 (1.03)	4.86 (1.57)	5.65 (1.53)	
Hospital	5.80 (0.92)	4.95 (1.63)	5.53 (1.45)	4.56 (1.88)	5.19 (1.33)	5.24 (1.86)	
Cave	4.75 (1.71)	4.68 (1.58)	5.52 (1.27)	5.31 (1.65)	4.89 (1.6)	5.34 (1.55)	
Average	4.75 (1.77)	5.07 (1.41)	5.50 (1.29)	5.00 (1.63)	5.13 (1.49)	5.56 (1.47)	

ANOVA results for deontological responders:

Load F(1,6) = 0.140, p = .772, $\eta p2 = .023$

Conflict F(1,6) = 3.724, p = .102, $\eta p2 = .383$

Interaction F(1,6) = 0.047, p = .835, $\eta p2 = .008$

ANOVA results for utilitarian responders:

Load F(1,6) = 0.306, p = .600, $\eta p2 = .048$

Conflict F(1,6) = 30.824, p < .001, $\eta p2 = .837$

Interaction F(1,6) = 0.024, p = .882, $\eta p2 = .004$

ANOVA results for deontological/utilitarian combined:

Load F(1,6) = 0.247, p = .637, $\eta p2 = .039$

Conflict F(1,6) = 38.165, p = .001, $\eta p2 = .864$

Interaction F(1,6) = 0.012, p = .915, $\eta p2 = .002$

Table S5. Average confidence ratings (SD) per item in Study 2

		Low load			High load		
	Deontological	Utilitarian	No conflict	Deontological	Utilitarian	No conflict	
	conflict	conflict	NO COMMICE	conflict	conflict	NO CONTILCE	
Plane	5.11 (1.82)	5.73 (1.04)	5.10 (1.40)	5.22 (1.56)	4.22 (1.73)	5.54 (1.42)	
Trolley	4.36 (1.86)	4.63 (1.50)	5.45 (1.27)	4.64 (1.69)	4.59 (1.47)	5.32 (1.62)	
Hospital	4.56 (1.65)	5.00 (1.28)	5.34 (1.73)	3.80 (2.17)	5.00 (1.15)	5.53 (1.17)	
Cave	4.50 (1.69)	4.40 (1.80)	5.54 (1.34)	5.29 (2.36)	4.90 (1.29)	4.88 (1.59)	

Average 4.66 (1.68) 4.85 (1.61) 5.43 (1.40) 4.68 (1.94) 4.74 (1.29) 5.43 (1.34)

ANOVA results for deontological responders:

Load F(1,6) = 0.026, p = .876, $\eta p2 = .004$

Conflict F(1,6) = 8.629, p = .026, $\eta p2 = .590$

Interaction F(1,6) = 0.131, p = .730, $\eta p2 = .021$

ANOVA results for utilitarian responders:

Load F(1,6) = 0.375, p = .563, $\eta p2 = .059$

Conflict F(1,6) = 21.336, p = .004, $\eta p2 = .781$

Interaction F(1,6) = 0.203, p = .668, $\eta p2 = .033$

ANOVA results for deontological/utilitarian combined

Load F(1,6) = 0.099, p = .764, $\eta p2 = .016$

Conflict F(1,6) = 30.121, p = .002, $\eta p2 = .834$

Interaction F(1,6) = 0.012, p = .918, $\eta p2 = .002$

Table S6. Average conflict composite rating (SD) per item in Study 3

		Low load			High load		
	Deontological	Utilitarian	No conflict	Deontological	Utilitarian	No conflict	
	conflict	conflict	No conflict	conflict	onflict conflict		
Plane	4.00 (1.62)	3.55 (1.83)	3.69 (1.57)	3.23 (1.95)	3.96 (2.14)	3.73 (1.62)	
Trolley	3.14 (1.89)	3.67 (1.76)	4.15 (1.73)	4.30 (1.95)	4.29 (1.83)	4.60 (1.88)	
Hospital	4.10 (1.54)	3.47 (1.79)	4.14 (1.64)	3.72 (1.66)	3.48 (1.81)	4.61 (1.98)	
Cave	2.57 (1.38)	3.72 (2.13)	4.35 (1.86)	3.00 (1.44)	4.15 (2.13)	4.5 (1.80)	
Average	3.16 (1.8)	3.50 (1.81)	4.09 (1.63)	3.47 (1.78)	3.82 (1.94)	4.4 (1.72)	

^{*}Note: all data was reversed scored (i.e., smaller values indicate higher experienced conflict). Conflict composite is the average of the difficulty and conflictedness rating.

ANOVA results for deontological responders:

Load F(1,6) = 0.763, p = .416, $\eta p2 = .113$

Conflict F(1,6) = 5.604, p = .056, $\eta p2 = .483$

Interaction F(1,6) = 0.143, p = .719, $\eta p2 = .023$

ANOVA results for utilitarian responders:

Load F(1,6) = 14.825, p = .008, $\eta p2 = .712$

Conflict F(1,6) = 4.473, p = .079, $\eta p2 = .427$

Interaction F(1,6) = 0.289, p = .610, $\eta p2 = .046$

ANOVA results for deontological/utilitarian combined:

Load F(1,6) = 7.066, p = .038, $\eta p2 = .541$

Conflict F(1,6) = 8.273, p = .028, $\eta p2 = .580$

Table S7. Pooled data across three studies for each item.

		Low load			High load		
	Deontological	Utilitarian	No conflict	Deontological	Utilitarian	No conflict	
	conflict	conflict	NO CONTICC	conflict	conflict	NO CONTILCE	
Plane	4.43 (1.91)	4.70 (1.79)	4.95 (1.59)	4.40 (1.89)	4.45 (1.94)	5.05 (1.58)	
Trolley	4.11 (1.89)	4.67 (1.71)	4.93 (1.68)	4.67 (1.66)	4.63 (1.61)	5.21 (1.72)	
Hospital	4.76 (1.57)	4.46 (1.75)	5.10 (1.68)	4.07 (1.82)	4.62 (1.62)	5.13 (1.74)	
Cave	3.78 (1.87)	4.40 (1.79)	5.13 (1.61)	4.59 (2.03)	4.63 (1.75)	4.94 (1.67)	
Average	4.14 (1.88)	4.54 (1.73)	5.05 (1.56)	4.37 (1.88)	4.59 (1.70)	5.14 (1.61)	

ANOVA results for deontological responders:

Load F(1,6) = 0.390, p = .555, $\eta p2 = .061$

Conflict F(1,6) = 133.498, p < .001, $\eta p2 = .957$

Interaction F(1,6) = 0.095, p = .768, $\eta p2 = .016$

ANOVA results for utilitarian responders:

Load F(1,6) = 0.303, p = .602, $\eta p2 = .048$

Conflict F(1,6) = 160.381, p < .001, $\eta p2 = .964$

Interaction F(1,6) = 0.043, p = .843, $\eta p2 = .007$

ANOVA results for deontological/utilitarian combined:

Load F(1,6) = 0.527, p = .495, $\eta p2 = .081$

Conflict F(1,6) = 177.038, p < .001, $\eta p2 = .967$

Interaction F(1,6) = 0.000, p = .994, $\eta p2 = .000$

B. Deontological only analyses

Here we present additional conflict detection analyses for the subgroup of participants who consistently gave deontological responses on the two conflict problems that they solved.

Table S8. Average conflict detection data (SD) for consistent deontological responders and all others (inconsistent deontological and consistent utilitarian) in the three studies.

		Low load			High load			
	Consistent deontological conflict	Other conflict	No conflict	Consistent deontological conflict	Other conflict	No conflict		
Study 1	n = 10	n = 101	n = 106	n = 13	n = 67	n = 77		
Confidence	5.80 (1.14)	5.02 (1.57)	5.50 (1.29)	5.38 (1.26)	5.23 (1.48)	5.56 (1.47)		
Study 2	n = 22	n = 62	n = 77	n = 10	n = 47	n = 54		
Confidence	5.05 (1.76)	4.95 (1.52)	5.43 (1.4)	5.30 (1.77)	4.85 (1.59)	5.43 (1.34)		
Study 3	n = 13	n = 70	n = 79	n = 11	n = 57	n = 65		
Reversed conflict composite	3.94 (1.29)	3.56 (1.81)	4.09 (1.63)	3.80 (1.47)	3.85 (1.94)	4.4 (1.72)		
Pooled	n = 45	n = 233	n = 262	n = 34	n = 171	n = 196		
	4.89 (1.63)	4.56 (1.76)	5.05 (1.56)	4.85 (1.62)	4.67 (1.77)	5.14 (1.61)		

ANOVA results Study 1:

Conflict F(1,21) = 0.945, p = .342, $\eta p2 = .043$

Load F(1,21) = 0.717, p = .407, $\eta p2 = .033$

Interaction F(1,21) = 0.043, p = .839, $\eta p2 = .002$

ANOVA results Study 2:

Conflict F(1,30) = 0.315, p = .579, $\eta p2 = .010$

Load F(1,30) = 0.170, p = .683, $\eta p2 = .006$

Interaction F(1,30) = 0.044, p = .835, $\eta p2 = .001$

ANOVA results Study 3:

Conflict F(1,22) = 3.757, p = .066, $\eta p2 = .146$

Load F(1,22) = 0.276, p = .605, $\eta p2 = .012$

Interaction F(1,22) = 0.765, p = .391, $\eta p2 = .034$

ANOVA results Pooled:

Conflict F(1,77) = 3.985, p = .049, $\eta p2 = .049$

Load F(1,77) = 0.018, p = .893, $\eta p2 < .001$

Interaction F(1,77) = 0.000, p = .999, $\eta p2 < .001$

C. Unfiltered analyses

Here we present an overview of the subject-wise data and analyses without filtering for load recall (i.e., all participants are included).

Table S9. Mean unfiltered ratings, decision time, and reading time for conflict and no-conflict dilemmas as a function of the dilemma response decision obtained in Study 1. Standard deviations are shown in parentheses.

		Conf	flict	No Cor	nflict
		Deontological	Utilitarian	Utilitarian/Deont ological	Other
Low load	Sample size	30	130	136	18
Confidence	1-7 scale	4.38 (1.66)	4.86 (1.41)	5.36 (1.27)	4.67 (1.73)
Reading time	Raw latencies	13.85 (9.23)	14.67 (9.21)	16.29 (11.37)	13.32 (8.64)
(s)	Antilogged	11.14 (2.02)	12.9 (1.66)	13.77 (1.76)	11.3 (1.75)
Decision time	Raw latencies	20.74 (16.02)	17.84 (7.57)	18.84 (10.7)	15.85 (10.29)
(s)	Antilogged	15.16 (2.39)	16.38 (1.52)	16.79 (1.6)	13.15 (1.89)
High Load	Sample size	44	99	114	22
Confidence	1-7 scale	4.59 (1.67)	5.01 (1.48)	5.29 (1.47)	4.46 (1.83)
Reading time	Raw latencies	15.22 (13.13)	14.95 (8.43)	14.62 (8.49)	15.49 (15.57)
(s)	Antilogged	11.6 (2.06)	12.83 (1.78)	12.48 (1.81)	10.88 (2.33)
Decision time	Raw latencies	15.54 (11.57)	16.14 (7.35)	17.3 (10.06)	11.15 (8.52)
(s)	Antilogged	12.3 (1.99)	14.75 (1.53)	15.36 (1.61)	8.8 (1.98)

Unfiltered dilemma decisions

ANOVA results

Conflict F(1,259) = 664.824, p < .001, $\eta p = .720$

Load F(1,259) = 3.224, p = .074, $\eta p2 = .012$

Interaction F(1,259) = 7.608, p = .006, $\eta p2 = .029$

Simple effect Load on Conflict: F(1,259) = 7.976, p = .005, $\eta p = .030$

<u>Unfiltered conflict detection analyses</u>

ANOVA results

ANOVA results for deontological responders:

Load F(1,70) = 0.513, p = .476, $\eta p2 = .007$

Conflict F(1,70) = 14.887, p < .001, $\eta p2 = .175$

Interaction F(1,70) = 0.003, p = .960, $\eta p2 = .000$

ANOVA results for utilitarian responders:

Load F(1,216) = 0.000, p = .988, $\eta p2 = .000$

Conflict F(1,216) = 17.975, p < .001, $\eta p2 = .077$

Interaction F(1,216) = 0.115, p = .735, $\eta p2 = .001$

ANOVA results for deontological/utilitarian combined:

Load F(1,248) = 0.153, p = .696, $\eta p2 = .068$

Conflict F(1,248) = 14.921, p < .001, $\eta p2 = .057$

Interaction F(1,248) = 0.016, p = .901, $\eta p2 = .000$

Table S10. Mean unfiltered ratings, decision time, and reading time for conflict and no-conflict dilemmas as a function of the dilemma response decision obtained in Study 2. Standard deviations are shown in parentheses.

		Conflict		No Cor	nflict
		Deontological	Utilitarian	Utilitarian/Deont ological	Other
Low load	Sample size	50	71	87	25
Confidence	1-7 scale	4.51 (1.68)	4.8 (1.65)	5.35 (1.39)	4.2 (1.92)
Reading time	Raw latencies	14.73 (8.03)	16.2 (11.15)	15.15 (10.19)	15.64 (11.77)
(s)	Antilogged	13.16 (1.94)	14.03 (1.86)	13.48 (1.79)	11.2 (2.43)
Decision time	Raw latencies	17.58 (11.83)	18.93 (11.96)	20.95 (12.99)	20.64 (27.12)
(s)	Antilogged	14.55 (1.88)	16.11 (1.77)	18.07 (1.72)	12.45 (2.63)
High Load	Sample size	41	72	89	20
Confidence	1-7 scale	4.74 (1.63)	4.55 (1.44)	5.26 (1.27)	4.19 (1.11)
Reading time	Raw latencies	16.3 (11.47)	13.59 (8.74)	15.38 (8.51)	12.73 (8.28)
(s)	Antilogged	11.24 (1.92)	12.47 (1.71)	12.72 (1.75)	9.84 (1.88)
Decision time	Raw latencies	19.33 (17.37)	17.9 (7.07)	19.51 (15.88)	15.73 (12.68)
(s)	Antilogged	14.65 (2.09)	16.32 (1.6)	16.21 (1.78)	12.11 (2.12)

Unfiltered dilemma decisions

ANOVA results

Conflict F(1,187) = 208.048, p < .001, $\eta p2 = .527$

Load F(1,187) = 0.024, p = .876, $\eta p2 = .000$

Interaction F(1,187) = 3.406, p = .067, $\eta p2 = .018$

Simple effect Load on Conflict: F(1,187) = 0.899, p = .344, $\eta p2 = .005$

Unfiltered conflict detection analyses

ANOVA results

ANOVA results for deontological responders:

Load F(1,86) = 0.061, p = .806, $\eta p2 = .001$

Conflict F(1,86) = 28.624, p < .001, $\eta p2 = .250$

Interaction F(1,86) = 0.284, p = .595, $\eta p2 = .003$

ANOVA results for utilitarian responders:

Load F(1,129) = 1.140, p = .288, $\eta p2 = .009$

Conflict F(1,129) = 32.714, p < .001, $\eta p2 = .202$

Interaction F(1,129) = 0.099, p = .735, $\eta p2 = .001$

ANOVA results for deontological/utilitarian combined:

Load F(1, 174) = 0.469, p = .494, $\eta p2 = .105$

Conflict F(1,174) = 31.104, p < .001, $\eta p2 = .152$

Interaction F(1,174) = 0.345, p = .558, $\eta p2 = .002$

Table S11. Mean unfiltered ratings, decision time, and reading time for conflict and no-conflict dilemmas as a function of the dilemma response decision obtained in Study 3. Standard deviations are shown in parentheses.

		Con	flict	No Cor	nflict
		Deontological	Utilitarian	Utilitarian/Deont ological	Other
Low load	Sample size	43	82	93	26
Confidence	1-7 scale	4.67 (1.89)	4.21 (1.86)	3.67 (1.72)	4.17 (1.97)
Reading time	Raw latencies	4.9 (1.74)	4.62 (1.78)	3.97 (1.71)	4.31 (1.75)
(s)	Antilogged	17.75 (12.07)	16.56 (11.56)	15.63 (7.52)	19.62 (25.47)
Decision time	Raw latencies	13.99 (2.08)	13.78 (1.86)	13.81 (1.69)	12.87 (2.45)
(s)	Antilogged	15.25 (12.98)	15.51 (8.36)	15.52 (9.49)	11.16 (5.51)
High Load	Sample size	42	83	94	27
Confidence	1-7 scale	4.75 (1.7)	4.49 (1.92)	3.82 (1.78)	3.7 (1.88)
Reading time	Raw latencies	4.92 (1.69)	4.51 (1.84)	3.97 (1.74)	4.04 (1.92)
(s)	Antilogged	21.27 (11.56)	19.76 (10.61)	19.64 (10.05)	17.8 (14.92)
Decision time	Raw latencies	11.72 (2.07)	13.53 (1.71)	13.25 (1.76)	9.73 (1.76)
(s)	Antilogged	16.43 (7.19)	17.28 (9.71)	17.59 (8.18)	14.95 (8.77)

Unfiltered dilemma decisions

ANOVA results

Conflict F(1,198) = 262.244, p < .001, $\eta p2 = .615$

Load F(1,198) = 1.243, p = .265, $\eta p2 = .002$

Interaction F(1,198) = 0.322, p = .570, $\eta p2 = .000$

Simple effect Load on Conflict: F(1,198) = 1.103, p = .294, $\eta p = .002$

Unfiltered conflict detection analyses

ANOVA results (Conflict composite index)

ANOVA results for deontological responders:

Load F(1,81) = 0.000, p = .983, $\eta p2 = .000$

Conflict F(1,81) = 15.703, p < .001, $\eta p2 = .162$

Interaction F(1,81) = 0.014, p = .905, $\eta p2 = .000$

ANOVA results for utilitarian responders:

Load F(1,151) = 0.060, p = .807, $\eta p2 = .000$

Conflict F(1,151) = 27.063, p < .001, $\eta p2 = .152$

Interaction F(1,151) = 0.030, p = .863, $\eta p2 = .000$

ANOVA results for deontological/utilitarian combined: Load F(1,185) = 0.174, p = .677, $\eta p2 = .070$ Conflict F(1,185) = 29.204, p < .001, $\eta p2 = .136$ Interaction F(1,185) = 0.040, p = .842, $\eta p2 = .000$

<u>Unfiltered conflict detection analyses</u>

ANOVA results Pooled

ANOVA results for deontological responders: Load F(1,241) = 0.255, p = .614, $\eta p2$ = .001 Conflict F(1,241) = 56.933, p < .001, $\eta p2$ = .191 Interaction F(1,241) = 0.038, p = .845, $\eta p2$ = .000

ANOVA results for utilitarian responders: Load F(1,500) = 1.083, p = .298, η p2 = .002 Conflict F(1,500) = 75.515, p < .001, η p2 = .131 Interaction F(1,500) = 0.001, p = .972, η p2 = .000

ANOVA results for deontological/utilitarian combined: Load F(1,611) = 0.000, p = .983, η p2 = .000 Conflict F(1,611) = 15.703, p < .001, η p2 = .162 Interaction F(1,611) = 0.000, p = .905, η p2 = .000

D. Bayesian analyses

Overview JASP output for Bayesian ANOVAs on pooled data.

Deontological responders

Models	P(M)	P(M data)	BF _M	BF 10	% error
Null model (incl. subject)	0.200	5.279e -66	2.111e -65	1.000	
Conflict	0.200	0.844	21.626	1.599e +65	1.602
load	0.200	6.859e -67	2.743e -66	0.130	1.513
Conflict+ load	0.200	0.136	0.632	2.584e +64	2.031
Conflict+ load + Conflict * load	0.200	0.020	0.080	3.735e +63	5.897

Note. All models include subject.

Utilitarian responders

Models	P(M)	P(M data)	BF _M	BF 10	% error
Null model (incl. subject)	0.200	2.635e -4	0.001	1.000	
Conflict	0.200	0.911	41.004	3457.408	1.086
load	0.200	2.273e -5	9.091e -5	0.086	0.905
Conflict+ load	0.200	0.080	0.347	302.703	1.988
Conflict+ load + Conflict * load	0.200	0.009	0.036	33.484	2.463

Note. All models include subject.

Combined

Models	P(M)	P(M data)	BF _M	BF 10	% error
Null model (incl. subject)	0.200	4.352e -4	0.002	1.000	
Conflict	0.200	0.884	30.574	2031.947	1.716
load	0.200	4.672e -5	1.869e -4	0.107	4.102
Conflict+ load	0.200	0.088	0.387	202.934	1.423
Conflict + load + Conflict * load	0.200	0.027	0.111	61.800	49.469

Note. All models include subject.