Supplemental Information

For

The Psychosemantics of Free Riding: Dissecting the Architecture of a Moral Concept

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Supplementary Analysis

In Studies 5A and 5B, we showed that free riders were categorized separately from batterers and thieves, respectively. Moreover, although there were no strong predictions, free riders differed from batters and thieves on a number of reaction items. We propose that these effects are driven in part by a specialized FREE RIDER concept. An alternative account of these data is that the categorization and reaction effects occur not because subjects are distinguishing between free riders and other classes of moral violators, but because they are distinguishing along a continuous dimension of (e.g.) moral severity. It is known that the mind can form context-sensitive categorical distinctions based on an underlying continuous dimension (e.g., Hampton, 2007; Jackendoff, 1983). If this alternative is correct, then a perceived difference on at least one of the impression items should predict the strength of categorization in 5A and 5B (assuming that at least one of these taps the dimension being used for categorization). After all, that is what we found for intentionality in Studies 1 and 2: Categorization scores were higher for those who perceived a greater difference in intentionality between those who failed to contribute by accident and those who failed because they ate the resource (Study 1) or did not try to find it (Study 2).

We mined the data to find support for this alternative view, but could find none. For example, if differences in aggressiveness were driving categorization in Study 5A, then there should be a positive correlation between a subject's difference score for aggressiveness (perceived aggressiveness of physically violent targets versus nonviolent ones) and the extent to which the subject categorized the targets. There was not. Indeed, the observed correlation was not significant and in the wrong direction, suggesting aggressiveness was not driving categorization, $r(62) = -.09$, $p = .49$. If differences in intentionality were driving categorization in Study 5A, then the correlation between categorization scores and intentionality difference scores should be positive. The observed correlation was again not significant and in the wrong direction, $r(62) = -.17$, $p = .17$. We tested for correlations between categorization and every other reaction item that showed a significant difference between violent targets and free riders or between thieves and free riders; none reached significance (for both studies, all rs $< .17$ in absolute magnitude, all ps $> .18$). Even though there were differences in reactions to free riders and other moral violators, none of these differences appear to have driven categorization.

Supplementary Table 1

Means (Standard Deviations) for Reactions to the Target Types: Study 4

	Lost food	Did not find food	*r*
Punishment	2.45 (1.10)	2.40 (1.12)	.05
Reward	4.44 (1.32)	4.54 (1.31)	.11
Work with	4.35 (1.03)	4.53 (0.98)	.18
Have on "team"	4.51 (0.98)	4.65 (0.97)	.14
Trustworthy	4.58 (0.86)	4.57 (0.83)	.14
Selfish	3.23 (0.95)	3.07 (0.76)	.19
Likeable	4.55 (0.79)	4.54 (0.78)	.01
Aggressive	4.01 (0.92)	3.85 (0.83)	.20
Competence	4.78 (0.74)	4.73 (0.84)	.06
Personality-as-cause	3.48 (1.16)	3.50 (1.10)	.02
Situation-as-cause	4.69 (1.17)	4.72 (1.12)	.03
Effort	4.94 (0.97)	4.94 (0.98)	.00
Intentionality	2.91 (1.13)	2.81 (1.07)	.14

Note. Greater means indicate a higher rating on the measure. Response options ranged from 1 to 7. All comparisons had *df* = 66.

Supplementary Table 2

Means (Standard Deviations) for Reactions to the Target Types: Study 5A

	Free riders	Unprovoked batterers	*r*
Punishment	4.18 (1.06)	4.50 (1.00)	.30*
Reward	3.80 (0.98)	3.61 (1.00)	.22†
Work with	3.52 (1.05)	3.24 (1.06)	.31*
Have on "team"	3.45 (1.02)	3.33 (1.03)	.13
Trustworthy	3.52 (0.89)	3.45 (0.93)	.09
Selfish	4.45 (0.93)	4.45 (0.86)	.01
Likeable	3.69 (0.93)	3.45 (0.89)	.26*
Aggressive	4.25 (0.98)	4.76 (0.93)	.46***
Competence	4.43 (1.04)	4.41 (0.99)	.03
Personality-as-cause	4.33 (0.90)	4.35 (0.88)	.02
Situation-as-cause	4.52 (1.13)	4.60 (1.01)	.10
Effort	4.61 (0.92)	4.68 (0.81)	.09
Intentionality	4.12 (1.09)	4.32 (0.89)	.26*

Note. Greater means indicate a higher rating on the measure. Response options ranged from 1 to 7. All comparisons had df = 63. †$p < .10$, *$p < .05$, ***$p < .001$.

Supplementary Table 3

Means (Standard Deviations) for Reactions to the Target Types: Study 5B

	Free riders	Thieves	r
Punishment	4.10 (1.10)	3.94 (1.09)	.17
Reward	3.75 (0.97)	3.91 (0.97)	.21†
Work with	3.42 (1.22)	3.67 (1.21)	.27*
Have on "team"	3.52 (1.12)	3.77 (1.05)	.28*
Trustworthy	3.60 (1.03)	3.80 (0.92)	.24*
Selfish	4.54 (0.96)	4.28 (0.95)	.31**
Likeable	3.75 (0.94)	3.93 (0.91)	.20
Aggressive	3.37 (1.08)	3.37 (1.13)	.00
Competence	4.65 (1.07)	4.72 (0.95)	.12
Personality-as-cause	4.04 (1.15)	4.06 (1.21)	.03
Situation-as-cause	5.08 (1.11)	5.06 (1.11)	.03
Effort	4.53 (0.82)	4.65 (0.74)	.02
Intentionality	4.57 (1.19)	4.56 (1.31)	.17

Note. Greater means indicate a higher rating on the measure. Response options ranged from 1 to 7. All comparisons had df = 63. $^{\dagger}p < .10$, *$p < .05$, **$p < .01$.