## Online supplementary material 3 (OSM 3): Additional analyses related to aggregated preferences and individual differences.

Study 1	All participants	pants Non-excluded		2.	3.	4.	5.	6.	7.
	Mean (SD) [n]	Mean (SD) [n]							
1. Mean matching preference (-1 – 1)	0.12 (0.38) [1007]	0.13 (0.37) [940]		34	.06	.26	26	.10	02
2. Mean choice preference (-1 – 1)	0.59 (0.32) [150]	0.59 (0.32) [150]	34		02	10	.12	13	.02
3. Mean "extreme matching scores" (0-1)	0.07 (0.11) [506]	0.07 (0.10) [469]	.06	02		.08	25	.05	.04
4. Comprehension in matching $(-2-2)$	1.27 (1.01) [1007]	1.37 (0.87) [940]	.29	10	.04		15	.07	01
5. Number of "equal matches" (0-8)	3.25 (1.60) [1007]	3.27 (1.58) [940]	24	.12	26	15		01	.09
6. Gender $(0 = \text{woman}, 1 = \text{man})$	0.40 (0.49) [997]	0.41 (0.49) [931]	.10	13	.04	.07	01		00
7. Age (in years)	24.30 (6.75) [997]	24.26 (6.68) [932]	00	.02	.05	.00	.07	.02	

Table OSM3-1: Means and bivariate correlations (Spearman's Rho) of the aggregated matching and choice-preferences in Study 1. Correlations over diagonal are for only non-excluded participants. Correlations below diagonal are for all participants. See variable explanations below.

Mean matching preference: On each of the eight focus dilemmas, participants obtained a score depending on how they matched the projects:

-1 = preference for project inferior on the presumed prominent attribute, 0 = no preference, +1 = preference for project superior on presumed prominent attribute. These eight scores were aggregated into the mean matching preference score.

Mean choice preference: On each of the eight focus dilemmas, participants obtained a score depending on which project they chose:

-1 = preference for project inferior on the presumed prominent attribute, +1 = preference for project superior on the presumed prominent attribute. These eight scores were aggregated into the mean choice preference score.

**Number of extreme matching scores:** For each of the eight focus dilemmas, participants in the NUMBER-condition were classified as extreme responders (those who matched with a number under the 5% percentile or over the 95% percentile) or non-extreme responders (all others). This variable illustrates the mean number of extreme responses for each participant (theoretical score 0-1). Note that participants in the EFFECIENCY-condition are excluded because extreme scores illustrated non-comprehension rather than extreme responding (less than 40% or more than 100% chance to survive if treated)

Comprehension in matching: There were two comprehension questions in the matching task – the test dilemma (Dilemma 0) and Dilemma 4. For each of these, participants who matched so that one project was inferior on both varying attributes were given the score -1. Participants who matched equally on these were given 0 and participants who matched "correctly" by making one project superior on one attribute and the other project superior on the other were given the score +1. This variable is the sum of the two dilemmas. Participants who responded "wrong" on both comprehension checks (-2) were excluded. A higher score indicates greater comprehension of the matching task.

**Number of "equal matches":** This variable illustrates the number of equal matches done by participants in the matching task. A higher score indicates that this participant is generally unwilling to express preferences.

**Gender**: 0 = female participants, 1 = male participants

**Age**: Current age of participants

Study 2	All participants	Non-excluded	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
	Mean (SD) $n = 605$	Mean (SD) $n = 435$										
1. Mean matching preference $(-1-1)$	0.10 (.0.32)	0.13 (0.31)		20	08	33	.13	.12	.07	.11	06	04
2. Mean choice preference (-1 – 1)	0.47 (0.39)	0.56 (0.32)	-12		07	.08	06	05	.11	12	.04	05
3. Number of "impossible to match" responses (0 –	0.43 (0.95)	0.44 (0.85)	04	.04		.37	02	12	04	03	.04	.21
7)												
4. Number of "equal matches" (0-7)	3.40 (1.81)	3.60 (1.57)	-18	.13	.31		31	04	10	04	.04	.08
5. Mean "extreme matching scores" (0-1)	0.11 (0.20)	0.07 (0.12)	.04	17	06	49		03	01	02	.06	.04
6. Number of correct comprehension checks in matching task (0-3)	2.51 (0.74)	2.76 (0.43)	.19	.15	07	.25	32		.12	.09	06	.05
7. Number of correct comprehension checks in choice task (0-4)	3.55 (0.88)	3.86 (0.34)	.13	.29	.10	.13	26	.36		.02	.06	.05
8. Gender $(0 = \text{woman}, 1 = \text{man})$	0.53 (0.50)	0.50 (0.50)	.06	-15	03	09	.02	01	09		.01	03
9. Age (in years)	36.65 (10.49)	37.40 (10.43)	01	.11	.11	.07	01	.01	.15	03		.26
10. Time to complete study (median)	694 sec	716 sec	.01	.08	.22	.05	04	.04	.15	07	.26	

Table OSM3-2: Means and bivariate correlations (Spearman's Rho) of the aggregated matching and choice-preferences in Study 2. Correlations over diagonal are for only non-excluded participants. Correlations below diagonal are for all participants. See variable explanations below.

Mean matching preference: On each of the seven focus dilemmas, participants obtained a score depending on how they matched the projects:

-1 = preference for project inferior on prominent attribute, 0 = no preference, +1 = preference for project superior on prominent attribute. These seven scores were aggregated into the mean matching preference score.

Mean choice preference: On each of the seven focus dilemmas, participants obtained a score depending on which project they chose:

-1 = preference for project inferior on prominent attribute, +1 = preference for project superior on prominent attribute. These seven scores were aggregated into the mean choice preference score. **Number of "impossible to match" responses**: Participants could for each dilemma state that the two projects could not be matched to be equally attractive by writing the number "0" (zero). This variable illustrates the total number of zeroes.

Number of "equal matches": This variable illustrates the number of equal matches done by participants in the matching task. A higher score indicates that this participant is generally unwilling to express preferences.

**Number of extreme matching scores:** For each of the seven focus dilemmas, participants were classified as extreme responders (those who matched with a number under the 5% percentile or over the 95% percentile) or non-extreme responders (all others). This variable illustrates the mean number of extreme responses for each participant (theoretical score 0-1).

Number of correct comprehension checks in the matching task: Three comprehension checks were included in the matching task. This variable illustrates the number of comprehension checks that participants responded accurately to. Note that participants failing more than one of these comprehension checks were excluded prior to analyses.

**Number of correct comprehension checks in the choice task**: Four comprehension checks were included in the matching task. This variable illustrates the number of comprehension checks that participants responded accurately to. Note that participants failing more than one of these comprehension checks were excluded prior to analyses.

**Gender**: 0 = female participants, 1 = male participants

Age: Current age of participants

**Time to complete study**: Number of seconds taken to complete the survey (as recorded by Qualtrics). Mean time is not representative as some participants took very long breaks while filling out the survey.

## **Brief discussion**

The mean matching preference and the mean choice preference correlated negatively ( $r_s = -.34$  and -.20 in Studies 1 and 2, both p's <.001). This indicates that participants who, for whatever reason, matched so that the project superior on the presumed prominent attribute was valued less, were more likely to later chose the project that was superior on the presumed prominent attribute. This is unsurprising as these participants chose between one project that was superior on both the prominent attribute and on the number of lives-attribute, against one that was inferior on both. Because of this correlation, we opted to make three separate tests for each dilemma.

The mean matching preference and the number of equal matches correlated negatively ( $r_s = -.26$  and -.33 in Studies 1 and 2, both p's <.001). This indicates that participants who matched so that the projects superior on the presumed prominent attribute were valued less, were also more likely to match the projects equally. This suggests that participants who did not comprehend the matching task were also more likely to use the "easy way out" option to match the projects equally.

The number of equal matches were negatively correlated with the number of extreme matching scores ( $r_s = -.25$  and -.31 in Studies 1 and 2, both p's <.001). This shows that participants who were inclined to use equal matches were less inclined to use extreme matches and vice versa. Note however that these variables are mutually exclusive on the dilemma level, which should make them negatively correlated.

The mean matching preference and the matching task comprehension was positively correlated ( $r_s$  = .29 and .19 in Studies 1 and 2, both p's <.001, including all participants). This shows that participants who comprehended the matching task were also more likely to express preferences for the projects superior on the presumed prominent attributes in the matching task.

The number of "impossible to match" responses correlated positively with the number of equal matches in Study 2 ( $r_s$  = .37, p <.001). This indicates that the two different ways to avoid expressing a preference in the matching task in large were adopted by the same people. This is especially remarkable as these variables are mutually exclusive on the dilemma level, which would make them negatively correlated.

Number of "impossible to match" responses was also positively correlated with completion time in Study 2 ( $r_s = .21$ , p < .001) indicating that participants who used the "impossible to match" option more often spent more time completing the survey.