Supplementary Information

SI Table 1. Conditions included in the dataset and their respective variable coding

Study	Condition	Description	task	ia_condition	disappointment_condition	social_disappointment	ia_reward_condition	ia_effort_condition
Bräuer et al., 2006	social-different	Subject handed bowl with LVR [low value reward]; partner handed bowl with HVR [high value reward]	0	1	1	1	1	NA
	social-same	Subject handed bowl with LVR; partner handed bowl with LVR	0	0	0	0	0	NA
	nonsocial-different	Subject handed bowl with LVR; empty cage handed bowl with HVR	0	0	1	1	0	NA
	nonsocial-same	Subject handed bowl with LVR; empty cage handed bowl with LVR	0	0	0	0	0	NA
Bräuer et al., 2009	same	Subject exchanges token for LVR; partner exchanges token for LVR	1	0	0	0	0	NA
	different	Subject exchanges token for LVR; partner exchanges token for HVR	1	1	1	1	1	NA
Brosnan & de Waal, 2003	EC [effort control]	Subject exchanges for LVR; partner receives HVR without exchanging	1	1	1	1	1	NA
	ET [equality test]	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	NA
	IT [inequality test]	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	FC [food control]	Subject exchanges for LVR; empty cage handed HVR	1	0	1	1	0	NA
Brosnan et al., 2005	ET [equity test]	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	NA
	IT [inequity test]	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	EC [effort control]	Subject exchanges for LVR; partner receives HVR without exchanging	1	1	1	1	1	NA
	FC [food control]	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
Brosnan et al., 2010	ETLV [equity test, low value]	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	0
	IT [inequity test]	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	FC [food control]	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
	GR [gift reward]	Subject exchanges for LVR; partner receives HVR without exchanging	0	1	1	1	1	NA
	DETLV [differential exchange test, low value]	Subject exchanges for LVR; partner receives LVR without exchanging	1	1	0	0	0	1
Brosnan et al., 2011	ETLV [equity test, low value]	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	0
	IT [inequity test]	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA

	FC [food control]	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
	GR [gift reward]	Subject exchanges for LVR; partner receives HVR without exchanging	0	1	1	1	1	NA
	DETLV [differential exchange test, low value]	Subject exchanges for LVR; partner receives LVR without exchanging	1	1	0	0	0	1
Brosnan et al., 2015	Equity	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	NA
	Inequity	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	Contrast	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
Engelmann et al., 2017	machine-nonsocial	Subject exchanges for LVR, which is dispensed by machine; partner's empty cage automatically given HVR	1	0	0	0	0	NA
	human-nonsocial	Subject exchanges for LVR, which is dispensed by human; partner's empty cage given HVR by human	1	0	1	1	0	NA
	machine-social	Subject exchanges for LVR, which is dispensed by machine; partner exchanges for HVR, which is dispensed by machine	1	1	1	0	1	NA
	human-social	Subject exchanges for LVR, which is dispensed by human; partner exchanges for HVR, which is dispensed by human	1	1	1	1	1	NA
Freeman et al., 2013	EC [equity control]	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	NA
	IB [inequity baseline]	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	HRC [high value reward control]	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
	GR [gift reward]	Subject given LVR without exchanging; partner given HVR without exchanging	0	1	1	1	1	NA
Heaney et al., 2017	EC [equity condition]	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	0
	IC [inequity condition]	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	FC [food control]	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
	FG [free gift]	Subject exchanges for LVR; partner receives LVR without exchanging	1	1	0	0	0	1
Hopper et al., 2013	SCC [social contrast condition]	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	0
	ICC [individual contrast condition]	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
	EC [equity control]	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	NA
Hopper et al., 2014	Same Inequity	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	HR Control	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
	Loss Ineqity	Subject shown HVR but then exchanges for LVR; partner shown HVR and exchanges for HVR	1	1	1	1	1	0
	Loss Equity	Subject shown HVR but then exchanges for LVR; partner shown LVR and exchanges for HVR	1	0	1	1	0	NA
	Solo Same	Subject exchanges for LVR; partner absent	1	0	0	0	0	NA
	Solo Loss	Subject shown HVR but then exchanges for LVR; partner absent	1	0	1	1	0	NA
Krasheninnikova et al., 2019	UNEQ [unequal]	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	EQUL [equal low]	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	NA

	UNEF [unequal effort]	Subject exchanges twice for one LVR; partner receives LVR without exchanging	1	1	0	0	0	1
	EC [effort control]	Subject exchanges twice for one LVR; partner absent	1	0	0	0	0	0
	FC [food control]	Subject exchanges for LVR; empty cage handed HVR	1	0	1	1	0	NA
Laumer et al., 2020	Equity	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	0
	Free-gift	Subject exchanges for LVR; partner receives LVR without exchanging	1	1	0	0	0	1
	Inequity	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	Non-social	Subject exchanges for LVR; empty cage handed HVR	1	0	1	1	0	NA
Massen et al., 2012	No effort equity	Experimenter pushes tray with LVR for subject and LVR for partner	0	0	0	0	0	NA
	No effort inequity	Experimenter pushes tray with LVR for subject and HVR for partner	0	1	1	1	1	NA
	Small effort equity	Subject pulls tray counterweighted with 0.5kg to get LVR; partner pulls tray counterweighted with 0.5kg to get LVR	1	0	0	0	0	NA
	Small effort inequity	Subject pulls tray counterweighted with 0.5kg to get LVR; partner pulls tray counterweighted with 0.5kg to get HVR	1	1	1	0	1	NA
	Large effort equity	Subject pulls tray counterweighted with 2.3kg to get LVR; partner pulls tray counterweighted with 2.3kg to get LVR	1	0	0	0	0	NA
	Large effort inequity	Subject pulls tray counterweighted with 2.3kg to get LVR; partner pulls tray counterweighted with 2.3kg to get HVR	1	1	1	0	1	NA
McAuliffe et al., 2015	Low Equity - Nonsocial	Subject pushes button, which delivers LVR to subject's tray and LVR to partner's tray; partner can't access reward	1	0	0	0	0	NA
	Inequity - Nonsocial	Subject pushes button, which delivers LVR to subject's tray and HVR to partner's tray; partner can't access reward	1	0	0	0	0	NA
	Low Equity - Social	Subject pushes button, which delivers LVR to subject's tray and LVR to partner's tray; partner can access reward	1	1	0	0	0	NA
	Inequity - Social	Subject pushes button, which delivers LVR to subject's tray and HVR to partner's tray; partner can access reward	1	1	1	0	1	NA
Silberberg et al., 2006	Inequity	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	Equity	Subject exchanges for LVR; partner exchanges for HVR	1	0	0	0	0	NA
Sosnowski et al., 2021	IT [inequity test]	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	FC [food control]	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
	GR [gift reward]	Subject given LVR without exchanging; partner given HVR without exchanging	0	1	1	1	1	NA
	DL [differential exchange, low value]	Subject exchanges for LVR; partner receives LVR without exchanging	1	1	0	0	0	1
	ET [equity test, low value]	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	0
Talbot et al., 2011	Equity control	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	NA
	Inequity baseline	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	0
	Individual contrast	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA

	Gift reward	Subject given LVR without exchanging; partner given HVR without exchanging	0	1	1	1	1	1
Talbot et al., 2018	Equity	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	NA
	Inequity	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	Contrast	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
Titchener et al., unpublished	Human distributor / partner present control	Subject exchanges for LVR, which is dispensed by human; partner exchanges for LVR, which is dispensed by human	1	0	0	0	0	0
	Machine distributor / partner present control	Subject exchanges for LVR, which is dispensed by machine; partner exchanges for LVR, which is dispensed by machinee	1	0	0	0	0	NA
	Human distributor / partner present test	Subject exchanges for LVR, which is dispensed by human; partner exchanges for HVR, which is dispensed by human	1	1	1	1	1	NA
	Human distributor / partner absent test	Subject exchanges for LVR, which is dispensed by human; partner's empty cage given HVR by human	1	0	1	1	0	0
	Machine distributor / partner present test	Subject exchanges for LVR, which is dispensed by machine; partner exchanges for HVR, which is dispensed by machine	1	1	1	0	1	0
	Machine distributor / partner absent test	Subject exchanges for LVR, which is dispensed by machine; partner's empty cage automatically given HVR	1	0	0	0	0	NA
van Wolkenten et al., 2007	Eq	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	NA
	Ineq	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	Eg-G	HVR held by experimenter before exchange; both subject and partner exchange for LVR	1	0	1	1	0	NA
	Eq-EF1	Subject exchanges for LVR; partner receives LVR without exchanging	1	1	0	0	0	0
Wascher & Bugnyar, 2013	Equity low	Subject exchanges for LVR; partner exchanges for LVR	1	0	0	0	0	NA
	Inequity	Subject exchanges for LVR; partner exchanges for HVR	1	1	1	1	1	NA
	Quality control	Subject exchanges for LVR; partner absent	1	0	0	0	0	1
Yasue et al., 2018	ET [equity test]	Subject receives LVR after holding spoon for 2 seconds; partner receives LVR after holding spoon for 2 seconds	1	0	0	0	0	0
	IT [inequity test]	Subject receives LVR after holding spoon for 2 seconds; partner receives HVR after holding spoon for 2 seconds	1	1	1	1	1	NA

Note. Condition names were taken from the respective papers. Reward quality is coded relative to the other conditions in the same paper; i.e., some rewards were designated as "medium quality" in the paper, but are presented here as low quality (as long as there was no lower quality reward conditions in the same paper). See main text for an explanation for the coding of the variables task, ia_condition, disappointment condition, and SI below for an explanation of the coding of ia_reward_condition, ia_effort_condition, and social_disappointment. For Krasheninnikova et al., 2019, only conditions in which the subjects exchanged once were included for all analyses except for Model 5, which investigates effect of effort inequity (for this model, only these conditions were included from this paper). Note that only conditions with task == 1 are included in the analyses reported throughout the paper.

SI Note 1. Species

For the models reported in the paper, we used the following subsets of the data (species were considered "reported to exhibit IA" if at least one published paper reported that they exhibit IA):

- All species: blue-headed macaw, blue-throated macaw, bonobos, capuchins, chimpanzees, crows, Goffin's cockatoos, gorillas, green great macaw, grey parrot, kea, long-tailed macaques, marmosets, orangutans, owl monkeys, ravens, rhesus macaques, and squirrel monkeys.
- IA reported species: capuchins, chimpanzees, crows, Goffin's cockatoos, long-tailed macaques, marmosets, ravens, and rhesus macaques.
- IA reported primates: capuchins, chimpanzees, long-tailed macaques, marmosets, and rhesus macaques.

SI Table 9
Number of subjects and studies per species.

Species	**N**	**K**
chimpanzees	81	6
capuchins	43	5
squirrel monkeys	38	2
long-tailed macaques	27	2
rhesus macaques	20	1
marmosets	16	2
Goffin's cockatoos	9	1
orangutans	9	2
gorillas	8	1
great green macaw	8	1
owl monkeys	8	1
grey parrot	8	1
blue-throated macaw	6	1

blue-headed macaw	6	1
crows	6	1
bonobos	5	1
kea	4	1
ravens	4	1

Note. Some subjects participated in multiple studies, and some studies included multiple species (see Table 1). N refers to number of subjects and K refers to number of studies.

SI Table 3
Model 4 (exploratory): Does reward inequity predict rejections in IA paradigms?

Population	K	N	$\beta_{ia\_reward\_condition}$	p(full-null comparison)
All species	23	302	0.1845 [-0.1298; 0.4794]	0.2559
IA reported species	18	204	0.1786 [-0.2052; 0.5703]	0.3603
IA reported primates	16	185	0.2409 [-0.1640; 0.6283]	0.2431
Chimpanzees	6	81	-0.09421 [-0.7752; 0.5677]	0.7768
Capuchin monkeys	5	43	0.5910 [-0.0850; 1.1685]	0.1058

Note. In the pre-registered analyses, we used a measure combining reward and effort inequity to predict rejections. Since reward and effort inequity are theoretically distinct, we report here additional exploratory analyses that look separately at each form. To check for an effect of reward inequity, we coded a new predictor variable, ia_reward_condition, as 1 if there was a partner present in the trial and receiving a higher quality reward; and 0 otherwise (we only included conditions in which the subject had to carry out a task, and ignored whether the partner had to carry out a task to receive the higher quality reward). The model was otherwise identical to Model 1 (main text):

rejection ~ ia_rewad_condition + (ia_reward_condition | species) +
(ia_reward_condition | study) + (ia_reward_condition | subject)

The results of Model 4 are represented in SI Table 2. We find no effect of reward inequity in any subset of the data.

SI Table 4
Model 5 (exploratory): Does effort inequity predict rejections in IA paradigms?

Population	K	N	$\beta_{ia\_effort\_condition}$	p(full-null comparison)
All species	10	87	-0.1005 [-0.4499; 0.2684]	0.5191

IA reported species	4	43	-0.04602 [-0.5607; 0.4299]	0.8322
IA reported primates	3	34	0.1064 [-0.4597; 0.7291]	0.69
Capuchin monkeys	2	19	0.02185 [-0.5980; 0.6357]	0.9393

Note. To test for an effect of effort inequity, we coded a new predictor variable, ia_effort_condition, as 1 if there was a partner present and receiving the *same* reward as the subject for no effort, and 0 otherwise. Only conditions in which no higher quality reward was presented by the human experimenter were included. Since only a minority of studies included conditions that varied only on effort of partner, to avoid confounding by study, we only included studies that included conditions with both ia_effort_condition == 1 and ia_effort_condition == 0 in this analysis (this led to the exclusion of all chimpanzee studies). The model was otherwise the same as Model 1, with ia_effort_condition taken instead of ia_condition as a predictor. For the models investigating IA reported primates and capuchin monkeys, due to the dearth of studies, we removed the random effects terms for study and species. These analyses are based on a comparatively small amount of data and should be interpreted with caution. Nevertheless, we find no effect of effort inequity.

SI Table 5
Model 6 (exploratory): Does reward inequity predict rejections in IA paradigms over and above food disappointment?

Population	K	N	$\beta_{ia\_reward\_condition}$	p(full-null comparison)
All species	17	244	0.05133 [-0.3350; 0.4462]	0.7845
IA reported species	12	155	-0.01869 [-0.3836; 0.3818]	0.9253
IA reported primates	11	146	0.04305 [-0.4063; 0.4276]	0.8222
Chimpanzees	5	75	-0.07929 [-0.8347; 0.6402]	0.821
Capuchin monkeys	3	30	0.3320 [-0.1605; 0.8877]	0.2006

Note. This model is equivalent to Model 3 (main text), with ia_reward_condition taken as a predictor instead of ia_condition. We find no effect of reward inequity beyond food disappointment.

SI Table 6
Model 7 (exploratory): Does social disappointment predict rejections in IA paradigms?

Population	K	N	$\beta_{social\_disappointment}$	p(full-null comparison)
All species	21	282	0.6450 [0.1479; 1.2130]	0.02346
IA reported species	16	184	0.7392 [0.0406; 1.3031]	0.02152
IA reported primates	14	165	0.7996 [0.2333; 1.4729]	0.02493
Chimpanzees	6	81	0.5832 [0.0174; 1.2424]	0.08963
Capuchin monkeys	4	37	1.2145 [-0.2370; 2.5450]	0.1513

SI Table 7
Model 8 (exploratory): Does social disappointment predict rejections over and above food disappointment?

Population	K	N	$\beta_{social\_disappointment}$	p(full-null comparison)
Chimpanzees and capuchin monkeys	2	21	2.7104 [1.3572; 5.2960]	0.000414

Note. In this model, we tested whether the experimenter handling a higher reward than the one the subject received predicted rejections over and above a higher quality reward being given by a machine to the partner. To this end, we only included conditions in which disappointment_condition == 1, and ran the following model:

rejection ~ social_disappointment + (social_disappointment | subject)

To avoid confounding by study, we only included conditions that varied on social_disappointment within disappointment_condition == 1. This led to the exclusion of all but two studies, which explicitly tested the social disappointment hypothesis. We find a highly significant effect of social disappointment.

SI Table 8
Model 9 (exploratory): Does the exclusion of one outlier condition affect the result of Model 1?

Population	K	N	$\beta_{ia\_condition}$	p(full-null comparison)
All species	23	302	0.2255 [-0.0763; 0.4760]	0.1246

Note. In the pre-registered Model 1, we find a trending effect of IA ($p < 0.10$) for all species, but not for any of the other subsets of the data. As one would expect the weakest effect when including species never hypothesized to exhibit IA, we decided to investigate this effect further. We identified one outlier condition in a study investigating gorillas (a species not hypothesized to exhibit IA), in which the human experimenter held up a higher quality reward before exchanging. Curiously, rejection rates were lower in this condition than in the other conditions in this study in which the subject received a lower quality reward (an effect not predicted by any of the hypotheses mentioned in this paper). Based on the overall pattern of results in the original paper, the authors do not interpret the result as suggesting an effect of IA. In our coding, however, subjects' behavior in this condition led to an overall effect of IA for gorillas. Excluding this condition from Model 1 – all species meant that the overall effect was no longer trending.

SI Table 9
List of eligible papers not included in the meta-analysis

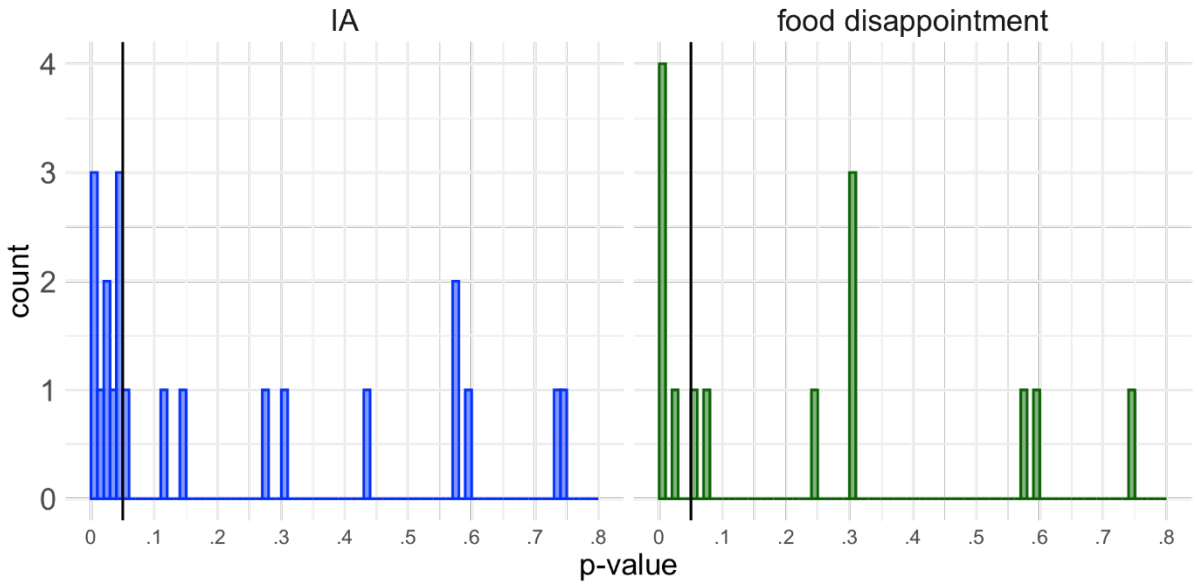
Study	**Species**	**N**	**Task**	**IA found?**
Dubreuil et al., 2006	capuchins	6	no task	no
Feller et al., 2016	baboons	12	targeting task	no
	gorillas	2		no
	white-cheeked gibbons	2		no
	orangutans	4		no

Fernandez, 2012	capuchins	8	token exchange	no (affective responses; exchange rates not reported)
Fontenot et al., 2017	capuchins	5	token exchange	no
Neiworth et al., 2009	cotton-top tamarins	11	token exchange	only when measured by increase in rejections from first to last session; overall condition difference n.s.
Roma et al., 2006	capuchins	8	no task	no
Trapani et al., 2020	giant pandas	10	leg standing	no

Note. These studies were not included in the meta-analysis since we did not to obtain the data for them. In the "targeting task," subjects had to hold a target for a set amount of time before receiving a reward. In the "leg standing" task, subjects had to stand on a leg for a set amount of time before receiving a reward.

SI Figure 1

Histogram of p-values in favour of the IA hypothesis and food disappointment hypothesis.



To estimate the risk of publication bias, we first scanned all eligible published papers for the p-value corresponding to the strictest test reported as evidence in favor of the IA and food disappointment hypotheses. For example, in any paper that included both individual contrast and inequity conditions, we extracted the p-value of the test differentiating these conditions as the p-value in favor of the IA hypothesis (see SI Table 8 for full list of p-

values). For papers that reported results from multiple species, we included one p-value for each species; otherwise, we only included one p-value from each paper to maintain statistical independence. Since some papers reported neither exact (or relevant) p-values, nor the test statistics required to compute such p-values, we were only able to extract 22 p-values from 19 papers for the IA hypothesis, and 14 p-values from 12 papers for the disappointment hypothesis. Of these, 10 were significant for the IA hypothesis, and 5 for the disappointment hypothesis (at $\alpha < 0.05$). This number is insufficient for reliably calculating the false discovery risk. However, a descriptive histogram of all p-values is presented in this figure.

The small number of p-values precludes any clear conclusions regarding the risk of publication bias. Nevertheless, the form of the histogram may cautiously be taken to suggest that such risk is present for the IA hypothesis. Note that the p-value at $0.05 < p < 0.06$ was extracted from a paper that reported the result as significant (as it would be in a one-tailed test). Furthermore, 30% of significant p-values are in the range of $0.04 < p < 0.05$, and there is a drop in the distribution at $p = 0.05$. For the disappointment hypothesis, the distribution appears to be left-skewed, tentatively suggesting a low false discovery risk.

SI Table 10
Overview of p-values included in Figure 4 (main text)

Study	p-value - IA hypothesis	Corresponding test	p-value - food disappointment	Corresponding test
Bräuer et al., 2006	result in wrong direction, not comparable	-	no relevant conditions	-
Bräuer et al., 2009	0.433238	social vs. nonsocial, across species	no relevant conditions	-
Brosnan & de Waal, 2003	0	EC vs FC	0	FC vs ET
Brosnan et al., 2005	0.026	IT vs FC	not reported	-
Brosnan et al., 2010	0.038	males only, IT vs FC	0.08	females only, ET vs. FC
Brosnan et al., 2011	0.596	IT vs. ETLV	0.6	FC vs ETLV

Brosnan et al., 2015	not reported	-	not reported	-
Dubreuil., et al., 2006	0.27502	partner vs accumulation	0.001	hiding and accumulation vs. control
Engelmann et al., 2017	result in wrong direction, not comparable	full-null comparison	no relevant conditions	-
Fontenot et al., 2017	not reported	-	relevant p-value not reported	-
Freeman et al., 2013	0.142	squirrel monkeys, HRC vs IB	0.001	squirrel monkeys, HRC vs. EC
	0.75	marmosets, HRC vs. EC vs. IB	0.75	marmosets, HRC vs. EC vs. IB
	0.31	owl monkeys, HRC vs. EC vs. IB vs. GR	0.31	owl monkeys, HRC vs. EC vs. IB vs. GR
Heaney et al., 2017	0.572	between-condition difference	0.572	between-condition difference
Hopper et al., 2013	0.048	SCC vs EC	0.242	ICC vs. EC
Hopper et al., 2014	0.045	Same Inequity vs. Loss Equity	0.31	Solo Same vs. Solo Loss
Krasheninnikova et al., 2019	0.116	ara ambiguus, UNEQ vs. FC	not reported	-
	0.807	Ara glaucogularis, UNEQ vs. FC	not reported	-
	0.573	blue-headed macaws, UNEQ vs. FC	not reported	-
Laumer et al., 2020	0.012	Free-gift vs. inequity	not reported	-
Massen et al., 2012	0.023	Small effort equity vs. small effort inequity	no relevant conditions	-
McAuliffe et al., 2015	not reported	-	no relevant conditions	-
Neiworth et al. 2009	not reported	-	0.024013	-
Talbot et al., 2018	< .00001	Inequity vs. equity; inequity vs. contrast not reported (however, difference between equity and contrast is n.s.)	0.30301	Contrast vs. Equity
Talbot et al., 2011	0.733	IB vs EC	0.051	IC vs. EC
Roma et al., 2006	not reported	-	no relevant conditions	-
Silberberg et al., 2006	not reported	-	no relevant conditions	-
Sosnowski et al., 2021	not reported	-	not reported	-
van Wolkenten et al., 2007	0.05737	Ineq vs. Eq-G	not reported	-

Wascher & Bugnyar, 2013	0.01	Qualtiy control vs. Inequity	0.001	equity vs. quality control
Yasue et al., 2018	0.041668	Inequity vs. Equity	no relevant conditions	-

Note. Since we are interested in investigating small-sample bias, only p-values from papers published in peer-reviewed journals were included.

SI Table 11

AIC comparing Models 1 and 2

Population	**Model 1: AIC**	**Model 2: AIC**	**ΔAIC (Model 1-Model 2)**
All species	42256.20	41827.65	428.54
IA reported species	32924.67	32587.34	337.33
IA reported primates	30687.29	30348.36	338.92
Chimpanzees	18315.60	18153.59	162.01
Capuchin monkeys	6086.83	5931.29	155.54