Behavioral data

The files *intensityJudgement_2ndTrialBrighter.csv* and *intensityJudgment_allTrials.csv* contain the behavioral data reflecting participants judgments from the intensity judgment task. Specifically, *intensityJudgment_allTrials.csv* contains the total number of trials for each participant and each condition considered for analysis (default = 12 per stimulus intensity; but might differ, either because participants failed to answer before timeout on some trials or due to technical issues). *intensityJudgement_2ndTrialBrighter.csv* contains the number of trials in which a participant indicated the second stimulus was perceived as brighter than the first. Both (number of trials in which the second stimulus was perceived as brighter and total number of trials) were used as input to the fitting of the psychometric functions.

Column	Column name	Explanation
1	Subs	Subject ID
2	Conds	Condition: act_pred = active predictable, act_unpred = active unpredictable, pas_pred = passive predictable, pas_unpred = passive unpredictable
3	26.6	Number of trials where second stimulus (with luminance of 26.6 cd/m^2) was presented/perceived as brighter
4	28.0	Number of trials where second stimulus (with luminance of 28.0 cd/m^2) was presented/perceived as brighter
5	29.5	Number of trials where second stimulus (with luminance of 29.5 cd/m^2) was presented/perceived as brighter
6	31.0	Number of trials where second stimulus (with luminance of 31.0 cd/m^2) was presented/perceived as brighter
7	32.7	Number of trials where second stimulus (with luminance of 32.7 cd/m^2) was presented/perceived as brighter

The file *psychometricFunction_GroupDataPsignifit4_PSE-slopes.csv* contains the parameters PSE (point of subjective equality) and slopes (at the PSE) as derived from the psychometric functions.

Column	Column name	Explanation
1	Subs	Subject ID
2	Act_pred_PSE	PSE: active predictable
3	Act_unpred_PSE	PSE: active unpredictable
4	Pas_pred_PSE	PSE: passive predictable
5	Pas_unpred_PSE	PSE: passive unpredictable
6	Act_pred_slope	Slope: active predictable
7	Act_unpred_slope	Slope: active unpredictable
8	Pas_pred_slope	Slope: passive predictable
9	Pas_unpred_slope	Slope: passive unpredictable

Eyetracking data

meanPupilSizePerCond.csv contains the pupil size for each condition (averaged across trials) for each participant.

fMRI data

main-effect_passive-active_ROI.nii contains the 2nd-level *T*-map of the main effect of action [(PP + PU) - (AP + AU)] in MNI-space. These results correspond to Figure 3A in the paper.

main-effect_passive-active.nii contains the 2nd-level *T*-map of the main effect of action [(PP + PU) - (AP + AU)] in MNI-space. These results correspond to Figure 3B in the paper.

main-effect_predictable-unpredictable.nii contains the 2nd-level *T*-map of the exploratory main effect of predictability [(PP + AP) - (PU + AU)] in MNI-space. These results correspond to Figure 3C in the paper.

posthoc-main-effect_delay.nii contains the 2nd-level *T*-map of the main effect of delay in MNI-space. These results correspond to Figure 4A in the paper.

correlation_BOLD-all-conds_pupilsize.nii contains the 2nd-level *T*-map of the negative correlation of individual pupil size BOLD-response in MNI-space. These results correspond to Figure 5B in the paper.