



**Supplementary figure 5. Pecking differences between the first and second experiment.** To assess differences in pecking rates between the two experiments, we compared the absolute numbers of pecks for all stimuli receiving a single US and were not part of the additivity training. In A), differences for Phase 1 are shown. Here, pecks elicited by stimuli A, B, C and D were assessed from experiment 1 for each individual pigeon and compared to the pecking rates of the same stimuli from experiment 2 using an unpaired t-test. We found that pecks were significantly reduced in experiment 2 compared to experiment 1 ( $t(126) = 4.94$ ,  $p < .001$ ,  $d = 0.87$ ). In B), the results for Phase 2 are shown (analyzing stimulus AD, BY and D). Here, pecking rates were again reduced in experiment 2 compared to experiment 1 ( $t(94) = 5.41$ ,  $p < .001$ ,  $d = 1.10$ ).